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MIXED STRESS ASSIGNMENT IN THE RUSSIAN VERB FASL 30 (MIT), MAY 13-16, 2021

1. RUSSIAN VERBAL STRESS AND ATHEMATIC STEMS

Russian **lexical stress**: every root or affix is accentually specified in one of the following four ways (Garde 1968, Halle 1973, Melvold 1990, Gladney 1995, Garde 1998, Alderete 1999, Feldstein 2015, etc.):

- Accented morphemes carry an accent on themselves (open class)
- Post-accenting and pre-accenting morphemes set accent on the next or previous syllable correspondingly: while there are no pre-accenting roots, the class of post-accenting roots is large (Halle 1973:316 asserts that there are more than 2000 of them) but closed
- Unaccented morphemes carry no accentual specification of their own (closed class estimated to contain more than 400 roots)

If none of the morphemes is dominant:

(1) 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.

Table 1: Accentual interaction in athematic ($\sqrt{-T-\phi}$) verbs

| | | accented PAST-FSG | unaccented PAST-PL | accented PRESENT-3SG |
|----|----------------------------------|-----------------------|------------------------------|---------------------------------------|
| a. | accented: - <i>lez</i> - 'climb' | léz−l-a | léz-l-i | léz-e-t |
| b. | post-accenting: -nes- 'carry' | nes-l- <mark>á</mark> | nes-l-í | nes ^j -ó-t |
| С | unaccented: -klad- 'put' | kla-l- <mark>á</mark> | kl <mark>á</mark> -l-i | klad ^j - <mark>ó</mark> -t |

Three morphemes: the stem, the tense suffix and the agreement ending

Diagnostic for stem accentuation: accentual invariability across the entire paradigm suggests an accented or post-accenting stem, whereas variable placement of stress is indicative of an unaccented stem

The behavior of stress in the **past** tense indicates that:

- > the past-tense suffix carries no accentual specification
- \blacktriangleright the feminine singular ending -*a* is accented, all others are unaccented
- we can therefore establish the accentual properties of the stem

Two accentual classes can be detected in the **present**: those with stress on the stem and those with stress on the present-tense suffix

Given the Basic Accentuation Principle, this means that the present-tense suffix is accented

And then we detect a fourth class:

- stress after the stem in the present tense
- \succ stress on the stem in the past

| d. retracting: $-griz$ - 'gnaw' $griz-l-a$ $griz-l-i$ $griz/-o-t$ |
|---|
|---|

The stems in this class are post-accenting, yet the accent is **retracted** in the past Independent evidence for retraction comes from nominal stress (Halle 1973, Melvold 1990, etc.)

None of this is controversial in any way

2. INFINITIVAL STRESS

The four accentual types collapse into two in the infinitive:

> accented, unaccented and retracting: stress uniformly on the root, the infinitival suffix surfaces as t^{j}

> post-accenting: stress on the infinitival suffix, which surfaces as *ti*

First impression: the infinitival suffix is unaccented (like the past-tense plural ending) Yet the infinitival suffix does introduce an accent

2.1. Accentuation of the infinitival ending: unaccented stems and the postfix -sia-

The reflexive postfix -*s^ja*- is accented:

NB: There is language change in progress with $-s^{j}a$ - becoming extrametrical and/or pre-accenting, so there is variation

- (2) a. *kl/ál* 'cursed.MSG', *kl/álo* 'cursed.NSG', *kl/áli* 'cursed.PL' unaccented stems *kl/alá* 'cursed.FSG'
 - b. *kljalsjá* 'swore.MSG', *kljalós^j* 'swore.NSG', *kljalís^j* 'swore.PL' *kljalás^j* 'swore.FSG'
- (3) a. *náčal* 'began.MSG', *náčalo* 'began.NSG', *náčali* 'began.PL' *načalá* 'began.FSG'
 - b. *načalsjá* 'started.MSG', *načalós^j* 'started.NSG', *načalís^j* 'started.PL' *načalás^j* 'started.FSG'

If the infinitival ending is unaccented, we expect in the infinitive the same stress pattern as in masculine singular forms, contrary to fact:

| (4) | a. b. | <i>kl^jál</i> 'cursed.MSG' <i>kl^jals^já</i> 'swore.MSG' | <i>kl^jást^j</i> 'curse.INF' <i>kl^jást^js^ja</i> 'swear.INF' |
|-----|----------|---|--|
| (5) | a. b. | <i>náčal</i> 'began.MSG' <i>načals^já</i> 'started.MSG' | <i>načát^j</i> 'begin.INF' <i>načátⁱsia</i> 'start.INF' |

In (5a'), infinitival stress is not initial (as expected when all morphemes are unaccented)

In (4b') and (5b'), infinitival stress is not final (as expected when all morphemes except the last one are unaccented) and for (5b'), it is not initial in idiolects where -s/a- is extrametrical

The infinitival suffix $-t\tilde{i}$ - is pre-accenting

Possibility: this is because it contains a yer, which normally causes retraction Dismissal: this does not affect our reasoning: the accent assigned by the stem should have been retracted as well

Whatever the reason for pre-accentuation, the BAP wrongly predicts stress on the stem: the accent assigned by the suffix should win:



Graudina, Ickovič and Katlinskaja 1976:198: the form in -ti- is a 19th-20th century innovation

2.2. What is the rule and what is the exception?

Elsewhere, when a post-accenting morpheme is followed by a pre-accenting one, the first one wins

There are no other pre-accenting inflectional suffixes

Looking at nominal derivation (Garde 1998:125):

- (7) pre-accenting diminutive suffix -*ik* preceded by a post-accenting...: Garde 1998:125
 - a. root $korábl^{j}$ 'ship' (cf. SG.GEN $korabl^{j}\hat{a}$) b. [korabl^j-ik] $\rightarrow koráblik$ ship-DIM small ship
- dominant nominalizer - $a\ddot{c}$ -[[tolk-ač]-ik] $\rightarrow tolk\dot{a}\check{c}ik$ push-ACTOR-DIM small pushboat
- (8) pre-accenting diminutive suffix $-i\delta k$ preceded by:

Zaliznjak 1985:86

post-accenting root: zernó 'grain' (cf. SG.GEN zerná) [[zern-išk]-o] $\rightarrow z^{j}órniško$ grain-DIM-NSG.NOM 'small grain'

(7b), as well as some other examples provided by Garde, can be explained by cyclicity (see Melvold 1990), but it wouldn't work for (7a)

Even with a dominant post-accenting suffix the pre-accenting suffix wins (as predicted by the Basic Accentuation Principle or by Melvold's approach to cycle)

Melvold 1990:79ff. disregards these infinitives, so everyone else after her also does

Possible explanations:

- (i) something special happens with *ti*-infinitives (Halle 1973: these verbal stems bear a special diacritic)
- (ii) accentuation in verbs is different than in nouns (cf. Smith 2011, 2016, also Kelly 1992): does this mean that the BAP shouldn't apply? Then what does?
- (iii) inflection is different from derivation with respect to BAP: same questions

The infinitival ending contains a yer (which normally causes retraction). But the problem is elsewhere

3. PASSIVE PAST PARTICIPLES

Three traditional allomorphs of the participial suffix: *-t-*, *-n-* and *-ĕn-* (Halle 1973, Feldstein 1986, Garde 1998:329-332; Melvold 1990 doesn't talk about participles at all)

3.1. The distribution of the three allomorphs

- (t) The passive past participle **suffix** -*t* is chosen with the following verb classes:
 - stems ending in a sonorant: a glide (or maybe a vowel, if the glide is epenthetic), a nasal or a lateral
 - stems formed with both suffixes -*nu* or on the basis of the five -*olo* stems
- (n) The passive past participle **suffix** -*n* is chosen with the following verb classes:
 - 2nd conjugation -*e* verbs with stems in a palatal triggering [e]-to-[a] change
 - all -*a* themes, whatever the conjugation class or variation (TS)

(en) The passive past participle **suffix** -*ĕn*- is chosen with the following verb classes:

- 2^{nd} conjugation -*i* verbs (with transitive softening) 2^{nd} conjugation -*e* verbs (except those turning into *a*, also seen from TS)
- athematic verbs (evidence that this is [ĕn] rather than [ēn]: turns into [jon])

Natural question: can the latter two allomorphs be unified? And all three? Work in progress

3.2. Accentuation of the -*ĕn*- allomorph

The same four classes for athematic verbs as with infinitives

The prefixes are added to facilitate PPP formation. They do not influence the position of the stress

| STEM | PRES.1SG | PRES.3SG | PAST.FSG/PL | PPP.FSG | PPP.pl |
|---|------------------------------------|--------------------------------------|--|--|--|
| a. accented 'climb over' | perel <mark>é</mark> zu | perel <mark>é</mark> zet | perel <mark>é</mark> zla/i | [%] perel <mark>é</mark> zena | [%] perel <mark>é</mark> zen i |
| b. unaccented: 'spin' (completive) | spr ^j ad <mark>ú</mark> | spr ^j ad <mark>ó</mark> t | spr ^j al <mark>á</mark> /spr ^j áli | spr ^j ádena | spr ^j áden i |
| c. post-accenting 'carry away' | unes <mark>ú</mark> | unes ^j ót | unesl <mark>á</mark> /unesl <mark>í</mark> | unesen <mark>á</mark> | unesen <mark>í</mark> |
| d. PA with retraction 'steal' (completive) | ukrad <mark>ú</mark> | ukrad ^j ót | ukrála/ukráli | ukr <mark>á</mark> dena | ukr <mark>á</mark> den i |

Table 2: PPP suffix -*ĕn*- with athematic verbs

With post-accenting stems stress doesn't fall on the PPP suffix, it falls on the gendernumber ending, skipping the suffix altogether

Past-tense forms: the fixed stress position in PPPs in (b) shows that the suffix is pre-accenting rather than simply retracting, as the past tense in (d)

No, we cannot use the same diagnostics as in section 2.1: those verbs take a different allomorph (t) and PPPs are not compatible with the reflexive suffix

Side note: to explain its unaccentability, can the PPP suffix be just -n, with epenthesis? Answer: yes, but then unification of the two nasal allomorphs would be impossible: there is evidence that the vowel of the suffix is underlying for 2nd conjugation verbs

Again, the pre-accenting PPP suffix loses out to the post-accenting root

3.3. What happens next?

In further derivation (nominalization and "long-form" formation) the main stress surfaces on the PPP due to independent reasons

Abstract -ing nouns are built on the basis of PPPs:

| (9) | a. | - <i>vez</i> - transport | | vez-ĕn-ij-o transport-PPP-NMZ-NSG.NOM | <i>vez<mark>é</mark>nie</i> luck |
|-----|----|-------------------------------------|---------------|--|---|
| | b. | - <i>bl^jud-</i> guard | | so.bl ^j ud-ĕn-ij-o PFX.guard-PPP-NMZ-NSG.NOM | <i>sobl^judénie</i> observance |
| | c. | -jĭd- go | \rightarrow | pro.jd-ĕn-ij-o PFX.go-PPP-NMZ-NSG.NOM | <i>projd<mark>é</mark>nie</i> passing |

But this suffix is not only pre-accenting, but also dominant: derived -ie nouns are stressed on the syllable preceding the suffix (for some exceptions see Zaliznjak 1985:108)

So the non-derived evángelie 'evangel' does not follow this pattern

| (10) | a. | mnogo.slov-ij-o many.word-NMZ-NSG.NOM | → mnogoslóvie verbosity |
|------|----|--|---|
| | b. | bez.duš-ij-o without.soul-NMZ-NSG.NOM | → <i>bezd<mark>ú</mark>šie</i> heartlessness |

Long forms of PPPs bear stress on the PPP suffix because the LF suffix -*oj*- is (independently known to be) stress-retracting (with some exceptions):

| (11) | a. | -vez- transport | → u.vez-ĕn-oj-ŭ PFX.transport-PPP-LF-MSG.NC | <i>→ uvez^jónnij</i> M taken away |
|------|----|--------------------------------------|---|--|
| | b. | - <i>bl^jud</i> - guard | → so.bl ^j ud-ĕn-oj-ŭ PFX.guard-PPP-LF-MSG.NOM | → sobl ^j ud ^j ónnɨj observed |
| | c. | -jĭd- go | → pro.jd-ĕn-oj-ŭ PFX.go-PPP-LF-MSG.NOM | → <i>prójdenn</i> ij (also arch. <i>projdⁱónn</i> ij) passed |

Special note: stress on the prefix is present also in the SF PPP (*prójden*) and is probably due to the fact that the root contains a yer. The nominalization in (9c) is not subject to such variation, further supporting the dominant status of the pre-accenting suffix -*ij*-

In category-changing null-derivation most of these roots undergo ablaut and become accented Note that there is no theme vowel in this derivation

(12) vezti' to transport' $(-vez) \rightarrow vozit'$ to transport, non-directed' (-voz)a. post-accenting: voz, vozi' cart.SG.NOM/SG.GEN/PL.NOM' probably non-deverbal b. accented: privozi bringing.SG/PL' potentially cyclic

4. **DISCUSSION**

Contrary to the BAP, the combination of a post-accenting athematic verbal stem with the preaccenting **infinitive or PPP suffixes** yields stress on the suffix

- ▶ In all other accentual classes these suffixes yield stress on the stem
- > In other verbal forms these roots behave as expected from post-accenting roots

Two types of possible explanations:

- something should be said about these roots
- something should be changed about the BAP

4.1. Post-accenting roots are special

Halle 1973:328: -*ti*- is accented, but these verbal stems bear a **diacritic** that:

- makes them not subject to the regular stress retraction rule (Metatony) postulated for infinitives (and the past tense)
- changes the vowel of the infinitival suffix from [ĭ] to [i]

Doesn't help in the later framework, but can be adapted (also to PPPs)

However, then the entire system of verbal stress should be reworked on the assumption that stress normally appears before the past/infinitive suffixes (cf. Garde 1998: -*l*- is pre-accenting except in some cases) and both unaccented and post-accenting stems would be exceptions

Alternative 1: these roots are accentually dominant

The accentual dominance hypothesis predicts post-stem stress in derivation as well. I know of no counterexamples, but...

- Alderete 1999: there are no dominant roots
- it would be just a coincidence that all non-retracting post-accenting roots are also dominant and all dominant roots are post-accenting

Additional assumption: the PPP suffix -*ĕn*- is **unaccentable**, so accent assigned to it is shifted to the right (13):



Is this also true for -ti? I don't know: stress on the reflexive postfix is expected then, but it is generally extrametrical anyway

Alternative 2: being accented yet unaccentable is different from being pre-accenting. Well...

4.2. Two types of BAP

The current version of the BAP privileges the leftmost accentual mark

But accentual marks in Russian are properties of morphemes

Alternative: give priority not to the leftmost accent, but to the accent assigned by the leftmost morpheme:

- (14) The distinction between the two grammars is minimal:
 - a. standard BAP: the leftmost accent wins
 - b. modified BAP: the accent assigned by the leftmost morpheme wins

The only difference in predictions occurs when a post-accenting morpheme is followed by a pre-accenting one

How to account for the contrast between our two suffixes and nominal derivation in 2.2?

4.2.1. Accentuation in verbs is different than in nouns

Category-specific phonology (Smith 2011, 2016) might draw the necessary distinction:

- \blacktriangleright the original formulation of the BAP (14a) is used for nouns
- $\blacktriangleright \qquad \text{the modified one (14b), for verbs}$

There is at least one known difference between Russian nouns and verbs: word-final complex codas are allowed in nouns, but not in verbs (except [st^j] in infinitives):

| nouns | <i>žezl/žézla</i> 'scepter.NOM/GEN' <i>voplⁱ/vóplⁱa</i> 'scream.NOM/GEN' | (15) |
|------------------------------------|--|------|
| adjectives (from Lightner 1972:82) | <i>podl/pódl.</i> ij 'mean, vile.SF.MSG/LF/MSG' <i>puxl/púxl.</i> ij 'plump.SF.MSG/LF/MSG' | (16) |
| verbs | $n^{j} \delta s (\leftarrow n \check{e} s-l)/n es-l-\acute{a}$ 'carry.PAST.MSG/FSG' $v^{j} \delta l (\leftarrow v \check{e} d-l)/v e-l-\acute{a}$ 'lead.PAST.MSG/FSG' $p^{j} \delta k (\leftarrow p \check{e} k-l)/p ek-l-\acute{a}$ 'bake.PAST.MSG/FSG' | (17) |

There are **no known pre-accenting verbalizers**, so (14b) cannot be checked elsewhere The secondary imperfective allomorph -iv- is pre-accenting, but not used with any post-accenting athematic stems, so it cannot be verified whether it patterns with inflectional or with derivational suffixes

No other accentual differences between verbs and nouns are evident

The categorial status of PPPs is unclear. Are **PPPs verbal or adjectival**?

Like SF (short-form) adjectives, SF PPPs can only appear in the predicate position (also with semi-copulas like okazatisja 'turn out'). As such they are used in the formation of passives (be + PPP) and serve as bases for long-form participles (which can be attributive, unlike SF PPPs). There is no reason to conclude that they are verbal (though see Babby 1973, 1975 for the hypothesis that SF adjectives are verbal)

Problem: for both verbs and nouns a sequence of **two post-accenting morphemes** yields the **stress assigned by the second one**

Garde's (1968:131) "boomerang effect": post- and pre-accenting morphemes repel the accent to the following or preceding syllable, respectively, so the last morpheme attached should win. This doesn't explain our puzzle or a sequence of two pre-accenting morphemes

Summary: maybe. No independent evidence

4.2.2. Accentuation in inflection is different than in derivation

Revithiadou 1999: accent is affected by morphological headedness. Maybe:

- \blacktriangleright the original formulation of the BAP (14a) is used for derivation
- \blacktriangleright the modified one (14b), for inflection

No independent evidence: there are no pre-accenting inflectional morphemes

Same problem for a sequence of post-accenting morphemes: why does the second one win?

Question: Is PPP-formation inflection or derivation? Depends on whether PPPs are verbs

4.2.3. Summary

The hypothesis that different versions of the BAP are used in different environments (verbs vs. nouns, derivation vs. inflection) is not supported by independent evidence

It does not work in more complex cases, where a sequence of two post-accenting morphemes is formed

5. CONCLUSION

The hypothesis that non-retracting post-accenting roots are also accentually dominant breaks nothing except Occam's razor

If roots can be dominant, for any given accented root it is impossible to determine whether it is also dominant. Also, what happens in dominant root-dominant suffix combinations?

Treating inflection/verbal accentuation as different from derivation/nominal accentuation is based on a more natural division but requires a total overhaul of the system Which might be needed anyway because of Garde's observations

And is PPP-formation inflection or derivation?

A comment from an anonymous reviewer: "the modified BAP [...] requires access to the underlying representation as well as to the current representation"

Answer: no, it is always very local. The "current representation" is just the stem (which must somehow encode post-accentuation anyway) and the suffix

6. FINAL VIGNETTE: VELAR VERBS

The (closed) class of post-accenting stems is the biggest one in athematic verbs

There are three kinds of post-accenting stems:

- > post-accenting regular: stress surfaces on the infinitival suffix ti (& after the stem in the past and in the present)
- > post-accenting velar: as above, but with stem stress in the infinitive
- > post-accenting retracting: stress precedes the infinitival ending is t^{i} (& on the stem in the past and on the tense suffix in the present)
- (18) post-accenting regular
 - a. 1 suppletive dental-final stem: *idtí* 'to go' (*-jĭd-/-šĕd-/-xod-*)
 - b. 17 regular dental-final stems: bl^justi 'to guard' (-bl^jud-), bresti 'to plod' (-brĕd-), vezti 'to transport' (-vĕz-), vesti 'to lead' (-vĕd-), gnesti 'to oppress, arch.' (-gnĕt-), mesti 'to sweep' (-mĕt-), obresti 'to find' (-ob-rĕt-), plesti 'to weave, braid' (-plĕt-), nesti 'to carry' (-nĕs-), pasti 'to shepherd' (-pas-), polzti 'to crawl' (-polz-), rassvesti 'to dawn' (-raz.svĕt-), rasti 'to grow' (-rost-), triasti 'to shake' (-trⁱas-), cvesti 'to bloom' (-cvĕt-), grⁱasti 'to approach, arch.' (-grⁱad-), gusti 'to drone, arch.' (-gud-)
 - c. 3 labial-final stems: *jetí* 'to fuck' (archaic) (*-jěb-*), *grestí* 'to row' (*-grěb-*), *skrestí* 'to scrub' (*-skrěb-*)
- (19) post-accenting velar
 - a. 12 velar-final stems: tolóč^j 'to pound' (-tolk-/-tolok-), beréč^j 'to protect' (-berěg-), vleč^j 'to attract' (-vlěk-), volóč^j 'to pull' (-volok-), žeč^j 'to burn' (-žg-/-žog-), peč^j 'to bake' (-pěk-), prenebréč^j 'to neglect' (-pre.ne.breg-), zapr^jáč^j 'to harness' (-za.pr^jag-), -reč^j 'to speak' (-rěk-), seč^j 'to flog' (-sěk-), steréč^j 'to guard' (-sterěg-), teč^j 'to flow' (-těk-)
 - b. 1 dental-final stem: $\check{c}est^{j}$ 'to respect' (- $\check{c}t$ -/- \check{c} -)
- (20) post-accenting retracting
 - a. 1 glide-final root that is non-asyllabic in the present tense: *-poj-/-pe-* 'sing'
 - b. 4 glide-final roots, that are asyllabic in the present tense: -*bj*-/-*bi* 'beat', -*vj*-/-*vi* 'weave', -*šj*-/-*ši* 'sow'
 - c. 4 nasal-final roots, one of which is bound: -*žn-/-ža* 'reap', -*žm-/-ža* 'press', -*mn-/-m^ja* 'knead', -*ras.pn-/-ras.p^ja* 'to crucify'
 - d. 3 dental-final stems that are not subject to vowel changes: -*griz* 'gnaw', -*krad* 'steal', -*pad* 'fall'
 - e. 1 velar-final stem: -*strig* 'cut (of hair)'
 - f. 2 liquid-final stems: -*tr*-/-*t*^{*i*}or- 'rub', -*pro.str*-/-*pro.st*^{*i*}or- 'to extend'

The reason for $-t^{j}$ - infinitives in (19a) is their **simple coda**: for the infinitive marker to surface as [tí] as opposed to [t^j], two factors should combine: a post-accenting root and a complex coda that would be produced if the vowel of the suffix is not pronounced

The reason for the $-t^{j}$ - infinitive in (19b) is its asyllabic root (* $\check{c}sti$ is unpronounceable) Their PPPs, as expected, have final stress

The only other velar-final athematic root, *-strig-* 'cut (of hair)', is also post-accenting but with retraction

The remaining two classes, (18) and (20), **cannot be distinguished by segmental phonology** (both contain dental-final stems with full vowels) or by argument structure (both contain

21

15

13

unaccusatives and transitives), or Aktionsart (activities, achievements and accomplishments attested in both classes, states in neither)

7. APPENDIX 1: DOUBLE DOMINANCE

The assumption that some roots may be dominant raises the question of the realization of the dominant root-dominant suffix combination

If the root wins, certain cases where a normally dominant suffix fails to impose its accent can be explained

Table 3: Accentual interaction in i-thematic verbs

| | | pres-1sg | present-3sg | PAST-FSG |
|----|---|------------------------------------|--------------------------------------|--|
| a. | accented: -saxar- 'add sugar' | sáxar ^j -u | sáxar ^j -i-t | sáxar-i-l-a |
| b. | post-accenting, retracting: - <i>lub</i> - 'love' | l ^j ubl ^j -ú | l ^j úbl ^j -i-t | l ^j ubl ^j -í-l-a |
| с. | post-accenting: -govor- 'speak' | govor ^j -ú | govor- <mark>í</mark> -t | govor- <mark>í</mark> -l-a |

They are all attested for (the closed class of) -e- verbs (Garde 1998:372):

| (21) a. | <i>vídel</i> 'see.PAST.M'/ <i>vížu</i> 'see.1SG'/ <i>vídit</i> 'see.3SG' also: <i>obídet^j</i> 'offend.INF', <i>zavíset^j</i> 'depend.INF', <i>slíšat^j</i> 'hear.INF' | stem stress |
|---------|--|----------------|
| b. | <i>vertél</i> 'turn.PAST.M'/ <i>verčú</i> 'turn.1SG'/ <i>vértit</i> 'turn.3SG' also: <i>deržát^j</i> 'hold.INF', <i>smotrét^j</i> 'look.INF', <i>terpét^j</i> 'suffer.INF' | variant stress |

c. *zveniél* 'ring.PAST.M'/*zveniú* 'ring.1SG'/*zvenít* 'ring.3SG' inflection stress the rest of the verbs in this group

For (the open class of) -*i*- verbs all these patterns are productive (see Red'kin 1965, Zaliznjak 1985:106-108, Slioussar 2012)

The relation between the accentuation of a noun and that of the verb that is derived from it is *not* straightforward (Red'kin 1965, Halle 1973:344-347, Zaliznjak 1985:107, Gladney 1995)

- (22) accented nouns
 - a. razžálobl'ú/razžálobit 'move to pity.1SG/3SG' (cf. žáloba/žálobu 'complaint') stem
 - b. bešú/bésit 'enrage.1SG/3SG' (cf. bésa/bésami 'devil.SG.GEN/PL.INS'
 - c. *bomblⁱú/bombít* 'bomb.1sG/3sG' (cf. *bómba/bómbu* 'bomb')

(23) post-accenting nouns

- a.jézžu/jézdit 'ride.1sG/3sG' (cf. jezdá/jezdú 'ride.NOM/ACC')stemb.žen'ú/žénit 'marry.1sG/3sG' (cf. žená/ženú 'wife.NOM/ACC')variantc.strujú/struít 'stream.1sG/3sG' (cf. strujá/strujú 'stream.NOM/ACC')inflection
- (24) unaccented nouns
 - a. kn^jážu/kn^jážit 'reign.1SG/3SG' (cf. kn^jáža/kn^jaz^jjámi 'prince.SG.GEN/PL.INS) S
 - b. poručú/porúčit 'entrust.1sG/3sG' (cf. ruká/rúku 'hand.NOM/ACC')
 - c. *boronⁱú/boronít* 'harrow.1SG/3SG' (cf. *boroná/bóronu* 'harrow.NOM/ACC')

When shifted, stress surfaces either on the theme (-*i*-) or on the **final vowel of the stem** (Zaliznjak's Deox rule, i.e., stress retraction), the latter specifically for nouns containing post-accenting suffixes:

- (25) a. ribák, ribaká 'fisher' $\rightarrow ribáčit^{j}$ 'to fish'
 - b. $sl\acute{e}sar'$, $sl\acute{e}sar\acute{e}j$ 'metalworker.SG.NOM/PL.GEN' $\rightarrow sles\acute{a}rit^{j}$ 'be a metalworker'

variant

infl

V

Ι

Gladney 1995:113 estimates some 60 verbs in this class; it is regular for [P-N]-derived verbs and compound-based verbs

NB: A case of derivation where the position of the stress in a derivative does not coincide with any stress in the base, contra Steriade and Yanovich 2015

Part of these facts can be captured if the suffix -*i*- is dominant, some stems are dominant as well (no apparent generalization) and it is the stem that wins in such circumstances

Four possibilities therefore:

- 1. dominant stem \rightarrow inherited stress on the stem
- 2. recessive stem \rightarrow stress after the stem (on *-i-*)
- 3. recessive stem with retraction \rightarrow stress on the final vowel of the stem
- 4. recessive stem with present-tense retraction \rightarrow stress on the final vowel of the stem in the present except 1sg, stress after the stem (on -*i*-) elsewhere

Option 1 is detectable if the stress is before the final syllable of the stem Option 3 is detectable only for verbs derived from non-accented stems

Retraction in the present remains a mystery not linked to any obvious other property of the stem (checking for (21): not the form of the secondary imperfective, not the retention of -i- in the secondary imperfective, not transitivity)

8. APPENDIX 2: TWO POST-ACCENTING MORPHEMES

Garde 1998, 2015: a sequence of two post-accenting morphemes yields the stress assigned by the second one:

Garde 1968:131: in a sequence of two pre-accenting morphemes, the first one wins; this is predicted by the BAP

(26) post-accenting root moskv- 'Moscow' + post-accenting nominalizer -ič- Garde 2015:128

moskv-ič-a → moskvičá Moscow-ORIGIN-SG.GEN 'a denizen of Moscow'

(27) post-accenting root vrač 'doctor' + post-accenting verbalizer -ov- Garde 1998:126

vrač-ov-a-t^j \rightarrow vračevát^j doctor-VRBZ-TH-INF 'to treat, heal'

Halle also lists such examples:

(28) post-accenting root korob- 'bast box' + post-accenting diminutivizer -ik- Halle 1973:340

korob-ĭk-a \rightarrow korobká bast box-DIM-SG.GEN 'a small box'

Neither of the two hypotheses in (14) predicts this outcome!

Garde's intuition: **pre-accentuation and post-accentuation are processes**. They occur along with morphological composition

Yet this view doesn't explain the infinitival suffix and the PPP suffix either

9. **REFERENCES**

Alderete, John. 1999. Morphologically Governed Accent in Optimal Theory, Doctoral dissertation, Rutgers University.

- Babby, Leonard H. 1973. The deep structure of adjectives and participles in Russian. *Language* 49, pp. 349-360.
- Babby, Leonard H. 1975. Transformation Grammar of Russian Adjectives. The Hague: Mouton.
- Feldstein, Ronald F. 1986. The Russian verbal stress system. *International Journal of Slavic Linguistics and Poetics* 33, pp. 43-61.
- Feldstein, Ronald F. 2015. The system of Russian verb stress. Paper presented at Web Lectures by Dr. Ronald Feldstein, Indiana University, Duke University, August 24, 2015.
- Garde, Paul. 1968. L'accent. Paris: Presses Universitaires de France.
- Garde, Paul. 1998. *Grammaire russe: phonologie et morphologie (2nd edition)*. Paris: Institut d'études slaves.
- Garde, Paul. 2015. Ударение (Accent}. Saint-Petersburg: Saint-Petersburg State University.
- Gladney, Frank Y. 1995. The accent of Russian verbforms. *Journal of Slavic Linguistics* 3, pp. 97-138.
- Graudina, Ljudmila Karlovna, Viktor Aleksandrovič Ickovič, and Lia Pavlovna Katlinskaja. 1976. *Grammatičeskaja pravil'nost' russkoj reči. Stilističeskij slovar' variantov*. Moscow: Nauka.
- Halle, Morris. 1973. The accentuation of Russian words. Language 49, pp. 312-348.
- Kelly, Michael H. 1992. Using sound to solve syntactic problems: The role of phonology in grammatical category assignments. *Psychological Review* 99, pp. 349-364.
- Kiparsky, Paul and Morris Halle. 1977. Towards a reconstruction of the Indo-European accent. In *Studies in Stress and Accent*, ed. by Larry M. Hyman, pp. 209-238. Los Angeles: University of Southern California.
- Lightner, Theodore M. 1972. Problems in the Theory of Phonology, Vol. I: Russian Phonology and Turkish Phonology. Edmonton: Linguistic Research, Inc.
- Melvold, Janis. 1990. Structure and stress in the phonology of Russian, Doctoral dissertation, MIT.
- Red'kin, V.A. 1965. Ob akcentnyx sootnosenijax imeni i glagola v sovremennom russkom literaturnom jazyke. *Voprosy jazykoznanija* 14, pp. 111-117.
- Revithiadou, Anthi. 1999. Headmost Accent Wins: Head Dominance and Ideal Prosodic Form in Lexical Accent Systems. LOT Dissertation Series 15. The Hague: Holland Academic Graphics.
- Slioussar, Natalia. 2012. Некоторые сведения о формообразовательных классах русских глаголов [Some data on the inflectional classes of Russian verbs]. Ms., Utrecht institute of Linguistics OTS/СПбГУ.
- Smith, Jennifer L. 2011. Category-specific effects. In *The Blackwell Companion to Phonology*, ed. by Marc van Oostendorp, Colin Ewen, Elizabeth Hume, and Keren Rice, pp. 1-25. London: Blackwell.
- Smith, Jennifer L. 2016. Segmental noun/verb phonotactic differences are productive too. *Proceedings of the Linguistic Society of America* 1, pp. 1-15.
- Steriade, Donca and Igor Yanovich. 2015. Accentual allomorphs in East Slavic: An argument for inflection dependence. In *Understanding Allomorphy*, ed. by Eulalia Bonet, Maria-Rosa Lloret, and Joan Mascaro, pp. 254-313. Sheffield: Equinox Press.
- Zaliznjak, A. A. 1985. Ot praslavjanskoj akcentuacii k russkoj. Moscow: Nauka.