

## RUSSIAN VERBAL STRESS RETRACTION, A BIGGER PICTURE

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### 1. INTRODUCTION: THE PHENOMENON

Russian (like a typical Slavic language) has lexical stress: every root or affix is specified in one of the following four ways (Garde 1968, 1998, Halle 1973, Melvold 1990, Gladney 1995, 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.

Not indicated in the transcriptions below: (a) palatalization before front vowels (/Ci/ → [Ci], /Ce/ → [Ce]), (b) vowel reduction phenomena in unstressed syllables, (c) voicing assimilation. Stress is marked by an acute accent on the vowel. The yers (high lax unrounded vowels) are represented as /i/ (front, IPA ɪ) and /ü/ (back, IPA ʊ). The letters ч (IPA tɕ, see Padgett and Žygis 2007), ш (IPA ɕ), ж (IPA ʒ), ц (IPA [tɕ]) are traditionally rendered as č, š, ž, and c.

#### 1.1. Athematic verbs

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

Main relevant points:

- the past-tense suffix carries no accentual specification
- the present-tense suffix is accented

Highlighting indicates the positions of the underlying accents

#### (2) **Accentual interaction in athematic (√-T-φ) verbs**

		<b>accented</b> PAST-FSG	<b>unaccented</b> PAST-PL	<b>accented</b> PRESENT-3SG
a.	accented: - <i>lez</i> - ‘climb’	<i>l<sup>é</sup>z-l-a</i>	<i>l<sup>é</sup>z-l-i</i>	<i>l<sup>é</sup>z-e-t</i>
b.	post-accenting: - <i>nes</i> - ‘carry’	<i>nes-l-á</i>	<i>nes-l-í</i>	<i>nes-ó-t</i>
c.	unaccented: - <i>klad</i> - ‘put’	<i>kla-l-á</i>	<i>klá-l-i</i>	<i>klad-ó-t</i>

Diagnostics for stem accentuation: accentual invariability across the entire paradigm suggests an accented or post-accenting stem, variable 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
- 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, so **the present-tense suffix is accented**



Certain things swept under the rug here: (a) the existence of the fourth class of verbs, with retraction in the past, (b) two roots with variant stress placement in the present (*-mog-* ‘be able’, *-im-/nʲa-* ‘have’), (c) accentuation of the infinitive and passive past participle (PPP) suffixes, which we will return to later; (d) the interaction of the stem-final consonant with the past-tense suffix *-l-*, as in (2b)

## 1.2. Thematic verbs

Most Russian verbs are not athematic: another suffix appears between the stem and the TAM

**Thematic verbs have only two accentual patterns in the past:** stress on the stem and stress on the thematic suffix

This means that the thematic suffix is accented

One exceptional thematic suffix (*-a-* in the past, nothing in the present) is unaccented

(3) **Accentual interaction in thematic verbs, illustrated for the thematic suffix *-ē-***

		accented PRES-3SG	accented PRES-1SG	accented PAST-FSG	unaccented PAST-PL
a.	accented: <i>-vid-</i> ‘see’	<i>víd-i-t</i>	<i>víž-u</i>	<i>víd-e-l-a</i>	<i>víd-e-l-i</i>
b.	post-stem: <i>-vel-</i> ‘order’	<i>vel-í-t</i>	<i>velʲ-ú</i>	<i>vel-é-l-a</i>	<i>vel-é-l-i</i>
c.	variant: <i>-vert-</i> ‘spin’	<i>vért-i-t</i>	<i>verč-ú</i>	<i>vert-é-l-a</i>	<i>vert-é-l-i</i>

The **present tense** of thematic verbs in (3c) deviates from what is expected

(3a) is expected for accented stems: stress is systematically on the stem

(3b) shows what is expected from non-accented (unaccented or post-accenting) stems

Melvold 1990:268ff.: the thematic suffix is accented, so for both unaccented and post-accenting roots there is an accent right after the stem. In the present tense the thematic suffix is followed by a vocalic suffix. The regular Russian hiatus resolution either turns the first vowel into a glide (in 1SG) or deletes it, and stress surfaces on the present-tense suffix

The pattern in (3c) is not expected at all

## 1.3. What is to follow

I will argue that the variant pattern cannot be derived from what we know so far or even what we haven’t yet considered unless we assume that:

- (i) the variant pattern is triggered by a diacritic property of the stem  $\Delta$ , where
- (ii) the stem includes the thematic suffix (and sometimes the prefix), and
- (iii)  $\Delta$  makes the present-tense suffix **unstressable**

In other words, there will be no easy local solution

How we will proceed:

- Empirical landscape: the role of inflection (vocalic vs. consonantal)
- Empirical landscape: the role of the thematic suffix
- Empirical landscape: the role of tense
- Intuition: unstressable tense
- Further issues: unaccentability
- Red herring: accentual type of the root/pre-thematic stem

Conclusion: a slight improvement on the previous analyses



## 2. EMPIRICAL LANDSCAPE

Necessary (although not sufficient) factors for stress retraction to the stem: the presence of an accent on the thematic suffix, a non-vocalic ending, present tense as a feature

### 2.1. The role of the ending

The usual description (1sg vs. all other present tense cells) is empirically inadequate

Feldstein 2015: the imperative (surface *-i* or *-/*) and the present tense gerund (surface *-ja*), both based on the “present-tense stem”, have the same stress placement as the 1SG form (e.g., *vert-i* ‘spin!’), and attributes this to them all having a simple vowel ending of the type *-V#*

It is not obvious that all of these suffixes have a vowel in their underlying representation

The active present participle suffix (surface [ũšč] for the 1<sup>st</sup> conjugation, surface [ašč] for the 2<sup>nd</sup>, most likely derived from the underlying *-nšč-*) is not stressed in variant verbs

**Summary:** no retraction for simple vocalic suffixes

Possible alternative: the suffix *-nšč-* is pre-accenting or retracting

### 2.2. The role of tense

The variant pattern is not just about phonology: no past-tense suffix (all consonantal, except the PPP suffix *-ěn-*) triggers retraction (except for a closed sub-class of athematic stems)

Retraction in active present participle generally patterns with non-1sg, but sometimes doesn’t (e.g., *učúsi/účitsja* ‘study.1SG/3SG’ vs. *učáščijsja* ‘studying.MSG’)

### 2.3. The role of the thematic suffix

It is very tempting to hypothesize that the variant pattern arises from the accentual properties of the athematic stem. Yet the picture is not straightforward:

- verbs with the accented thematic suffixes *-aj-* and *-ej-* or with the pre-accenting mutative suffix *-nu-*: no variant pattern
- 5 verbs with the accented suffix *-ǫ-*: obligatory variant pattern
- athematic verbs and verbs with the unaccented *-a-* thematic suffix that is deleted in the present tense (both closed classes): virtually no variant pattern
- verbs with the accented semelfactive suffix *-nu-*: virtually no variant pattern
- verbs with the accented suffixes *-ē-*, *-i-* and *-a-/i-*: frequent variant pattern

#### (4) Stress and thematic suffixes

	PRES.1SG	PRES.2SG	INF	gloss	thematic suffixes	retraction
a.	léz-u	léz-e-šʲ	léz-tʲ	‘climb’	none or Ø	2/84
b.	čit-áj-u	čit-áj-e-šʲ	čit-á-tʲ	‘read’	<b>a/aj</b>	0/∞
c.	žážd-u	žážd-e-šʲ	žážd-a-tʲ	‘thirst’	a/Ø	1?/20 (39)
d.	piš-ú	píš-e-šʲ	pis-á-tʲ	‘write’	a/i	60/105 (86)
e.	bel-ěj-u	bel-ěj-e-šʲ	bel-ě-tʲ	‘be white’	<b>e/ej</b>	0/∞
f.	gíb-n-u	gíb-n-e-šʲ	gíb-nu-tʲ	‘perish’	nu/n (mutative)	0/∞
g.	tolk-n-ú	tolk-n-ó-šʲ	tolk-nú-tʲ	‘push’	<b>nu/n (semelfactive)</b>	6/∞
h.	kolj-ú	kól-e-šʲ	kol-ó-tʲ	‘stab’	o/i	5/5
i.	smolj-ú	smol-j-šʲ	smol-j-tʲ	‘tar’	<b>i</b>	43%
j.	gorj-ú	gor-j-šʲ	gor-ě-tʲ	‘burn’	e/Ø	6/83



The parentheses in (c) and (d) indicate the uncertain status of 19 *j*-final verbs, which all have stem stress  
43% for *i*-verbs is based on the calculation in Slioussar 2012, cf. her 4% for the semelfactive *-nu-*

All three classes are productive for *i*-verbs (Slioussar 2012)

Red'kin 1965, Zaliznjak 1985: no correlation between the thematic suffix and stress  
Slioussar 2012, this work: there is!

Apparent generalization: the variant pattern can only arise when an accented vowel is deleted

It is only productive with *-i*-verbs (maybe because the thematic suffix *-i-* and the semelfactive suffix *-nu-* are the only productive suffixes fulfilling these conditions)

I have a database containing all non-productive verbal stems of Russian by class with their accentual properties, anyone is welcome to study it and draw their own conclusions (some knowledge of Cyrillic is needed)

## 2.4. The nature of the variant pattern

In variant verbs stress surfaces:

- after the stem in the present (1sg ([u]), gerund ([ja]) and imperative ([i])), and in the past finite forms [l], active participle (*-vš-*) and gerund (*-v-*)
- stem-finally in all other present tense forms (all consonantal)
- active present participles generally pattern with the non-1sg present tense (with some deviations, Zaliznjak 1985:29), the passive past participle (PPP) suffix is special (see Matushansky [to appear])

This is **not pure phonology** because consonantal suffixes in the past differ from consonantal suffixes in the present

Halle 1973:328, Melvold 1990:291, Idsardi 1992:124: **retraction**

The accent assigned to suffixes other than the 1sg [u], the gerund [ja] and the imperative [i] is retracted one syllable to the left





They cannot be analyzed as pre-accenting because this would predict stem-final stress for all non-accented verbal stems (and why should only simple vocalic suffixes be so?)

While the active present participle suffix differs from other vocalic suffixes in the present, it might just have its own accentual specification, or retraction could be triggered just by closed syllables (though why?)

## 3. SEGMENTAL PHONOLOGY

The vowel of the thematic suffix is deleted in the present tense:

### (5) *i*-stem (2<sup>nd</sup> conjugation)

- a. [[[[PFX+√]-TH]<sub>1</sub>-PRES]<sub>2</sub>-3SG]<sub>3</sub> 3SG  
 [[[[v.lub-í]<sub>1</sub>-í]<sub>2</sub>-t]<sub>3</sub>  
  
 [[v.lub-í]<sub>2</sub>-t]<sub>3</sub> cycle 2: VOWEL BEFORE VOWEL DELETION  
  
 [v.liúbit] retraction
- b. [[[[PFX+√]-TH]<sub>1</sub>-PRES]<sub>2</sub>-1SG]<sub>3</sub> 1SG  
 [[[[v.lub-í]<sub>1</sub>-í]<sub>2</sub>-u]<sub>3</sub>  
  
 [[v.lub-í]<sub>2</sub>-u]<sub>3</sub> cycle 2: VOWEL BEFORE VOWEL DELETION  
  
 [v.liublú] cycle 3: GLIDE FORMATION



- there are verbs (4d) that have glide-formation and transitive softening throughout the present-tense paradigm and retraction in the same cells
- there are some (a few) 1<sup>st</sup> conjugation verbs with the variant pattern yet no glide-formation in the 1sg
- there is no glide-formation in either the imperative or the present-tense gerund

But not all verbs with two accents on one syllable undergo retraction

What happens in retracting verbs can be viewed as **lexically conditioned avoidance of stress on the present-tense suffix** (and stem-final stress is very frequent in derived verbs, cf. 6.1.1)

## How to achieve this?

Suppose the pattern in (3c) involves **allomorphy of the present-tense suffix**: it is *marked to resist stress*

Assuming that the present-tense suffix (1<sup>st</sup> conjugation *-io-*, 2<sup>nd</sup> conjugation *-i-*) is lexically accented (or inherits the accent of the thematic suffix after its vowel has been deleted before another vowel):

(6) a.  $\begin{array}{cccc} & * & * & \\ * & * & & * \\ \text{ljub} & i & \bar{i} & u \end{array}$       b.  $\begin{array}{cccc} & * & * & \\ * & * & & * \\ \text{ljub} & i & \bar{i} & u \end{array} \rightarrow \text{ljubli} \acute{u}$

The accent of the present-tense suffix cannot surface on the suffix itself because it is marked to resist stress, but there is a syllable after it and this is where the accent lands

Non-1sg agreement morphemes after the present-tense suffix are non-syllabic (2SG is *-šǔ-* or *-š-*, depending on the analysis, 3SG is *-tǔ-* or *-t-*, 1PL is *-mǔ-* or *-m-*, 3PL is *-ntǔ-* or *-nt-*; the one exception is the 2PL *-te-* (cf. Halle 1973:327)), for which a special proviso is needed:

(7) a.  $\begin{array}{cccc} & * & * & \\ * & & & \\ \text{l} & \text{i} & \bar{\text{i}} & \text{t} \end{array} \rightarrow \text{l} \bar{\text{u}} \text{b} \text{t}$       b.  $\begin{array}{cccc} & * & * & \\ * & & & \\ \text{l} & \text{i} & \bar{\text{i}} & \text{t} \end{array} \rightarrow \text{l} \bar{\text{u}} \text{b} \text{t}$

Since agreement morphemes cannot bear stress, the accent of the present-tense suffix must surface on the preceding syllable, which is obviously the last syllable of the stem

Often unstressability results from independent properties of the segment or morpheme:

- Some vowels are inherently unstressable (e.g., *i* before *y* & schwa in Passamaquoddy (LeSourd 1988:71-74))
- Some prefixes in Squamish are not part of the same prosodic domain as the root and the suffixes (Dyck 2004:165-171)



Bogomolets 2020: unaccented suffixes in Choguita Rarámuri are lexically unstressable and this unaccentability cannot be motivated by the properties of the vowel or of the morpheme

### 4.3. Local independent evidence for unstressability

Russian yers come in two varieties: those that can be stressed when lowered (ĩ→ě, ũ→ǒ) and those that cannot

Background: **Russian has retraction in nouns** (section 6.2.4): the accent introduced by the plural ending surfaces on the syllable before it (Halle 1973, 1975, 1997, Melvold 1990, etc.):

(8) baseline:

- a. unaccented stem: -*zermal*- ‘mirror’: nom.sg: *zérkalo*, nom.pl: *zermalá*
- b. post-accenting stem: -*božestv*- ‘deity’: nom.sg: *božestvó*, nom.pl: *božestvá*
- c. retracting stem: -*koles*- ‘wheel’: nom.sg: *kolesó*, nom.pl: *koliósa*

Sometimes this stem-final syllable contains a yer, which cannot bear stress (and is deleted in the surface representation anyway), and then the accent moves one more syllable to the left:

- (9) a. -*kolíc*- ‘ring’: nom.sg: *kolícó*, nom.pl: *kólíca*
- b. -*pisím*- ‘letter’: nom.sg: *pisímó*, nom.pl: *píšíma*

The genitive plural is also a yer, so cannot bear stress and the accent surfaces before it:

- (10) a. -*zermal*- ‘mirror’: nom.sg: *zérkalo*, nom.pl: *zermalá*, gen.pl: *zerkál*
- b. -*božestv*- ‘deity’: nom.sg: *božestvó*, nom.pl: *božestvá*, gen.pl: *božéstv*
- c. -*koles*- ‘wheel’: nom.sg: *kolesó*, nom.pl: *koliósa*, gen.pl: *koliós*

However, the genitive plural yer triggers the lowering of the stem-final yer (ĩ→ě):

- (11) a. -*kolíc*- ‘ring’: nom.sg: *kolícó*, nom.pl: *kólíca*, gen.pl: *koléc*
- b. -*pisím*- ‘letter’: nom.sg: *pisímó*, nom.pl: *píšíma*, gen.pl: *píšem*

In (11b) the lowered stem-final yer cannot be stressed (for whatever reason) and stress shifts one syllable further to the left

Conclusion: there are lexically determined cases where a syllable cannot bear stress

It is unlikely that the difference between (11a) and (11b) is due to the fact that a potential suffix is detectable in (11b): while both *remesló* ‘trade’ and *polotnó* ‘cloth’ are historically complex, in contemporary Russian they are perceived as underived (and *kolícó* ‘ring’ is actually also historically a derived noun)

## 5. CONCLUSION

If Russian present-tense retraction is viewed as lexically triggered unstressability of the tense morpheme, we obtain the desired behavior: its underlying accent is realized on the following syllable when possible (i.e., when the next morpheme contains a vowel) and on the preceding syllable otherwise

Retraction does not seem to be linked to any obvious morphological, syntactic or semantic property of the stem: not the form of the secondary imperfective, not the retention of *-i-* in the secondary imperfective, not transitivity

This picture is in fact very similar to what Revithiadou 1999 describes as the proper behavior of unaccentable morphemes (except not for Russian)

If retraction is in general due to unstressability (cf. Dubina 2012:153):

- plural retraction in nouns can be accounted for in the same way (on the condition that a whole morpheme that can be unstressable, not only a syllable)
- retraction with unaccented stems (cf. (27) in section 6.2.4) follows if
- an unstressable accented morpheme can be concluded to be possible



Vocalic suffixes provide the location for the accent of the unstressable present-tense suffix  
The active present participle does not and requires an additional discussion

### 5.1. Unaccentability as an issue (more on this in section 6.2)

Matushansky [to appear]: the passive past participle suffix *-ěn-* is unaccentable. Yet when the morpheme after it is assigned an accent and cannot bear it or is pre-accenting, stress surfaces on the PPP suffix:

- (12) a. v.ľub-i-ě*n*-a → vľublená fsg  
 b. v.ľub-i-ě*n*-ŭ → vľublŭn msg  
 c. v.ľub-i-ě*n*-a*j*-a → vľublŭnnaja preaccenting long-form suffix

This unaccentability is different from unstressability

Can post-accentuation be derived from unstressability or unaccentability?

Spoiler: probably not

Possible venue of research: maybe the suffix simply contains a yer that is vocalized (and thus becomes stressable) after accent is assigned to the next syllable

### 5.2. Further issues

There can be some more refinements on the proposal and further questions:

- (i) What is the trigger for unstressability? Answer (see section 6): the entire verbal stem (i.e., the addition of a prefix or a change in the thematic vowel can affect the accentual pattern)
- (ii) Can an unstressable morpheme have an accent? Possible answer: the accent that it avoids is the accent of the preceding verbal stem (on the assumption that deletion of the vowel of the thematic suffix retains the accent)
- (iii) If unstressable morphemes can be accented, what does it say about the encoding of lexical accent? Maybe it *is* tonal as in Dubina 2012
- (iv) Can unstressability be assigned to an abstract morpheme (present tense in both of its exponents: 1<sup>st</sup> conjugation *-jo-*, 2<sup>nd</sup> conjugation *-i-*)? Answer: maybe but maybe unstressability is assigned not to an abstract morpheme but rather to the syllable after the stem
- (v) What about the variant pattern in two athematic verbs?

#### 5.2.1. The imperative

If the sequence of an [i] followed by an unstressable [i] is resolved to an unstressable [i], why is the sequence of an unstressable [i] followed by an [i] of the gerund not unstressable?

I don't know, but the imperative ending is puzzling for one more reason: it does not trigger velar mutation (*bereg-i* 'preserve-IMP' rather than *\*berež-i*)

#### 5.2.2. The gerund

How to avoid transitive softening before the gerund suffix?

The problem is there if the suffix is underlyingly *-ja-*. However, the underlying representation of this suffix could be *-n-*: Russian has a lexically limited rule of turning a tautosyllabic front vowel plus nasal sequence (e.g., [ě*n*]) into [a] (see Lightner 1967)



### 5.2.3. Variant athematic verbs

There are two athematic verbs that exhibit the variant pattern in the present tense (see 6.2.2): *-mog-* ‘be able to’ and *-im-* (historically, ‘have’, but synchronically probably cranberry)

*-mog-* is easy: it is post-accenting

*-im-* is problematic because it is unaccented. Either we must assume that it is unaccented only in the past tense or the present-tense suffix has to be accented even when unstressable

At any rate this is a very special verb (the root is *-(n)im-* in the present tense and *-nʲa-* in the past) and might involve allomorphy

## 6. THE ROLE OF THE STEM

The accentual structure of variant thematic verbs is as follows:

- (13) 1<sup>st</sup> conjugation: √-nú/á/ó-ě-φ  
2<sup>nd</sup> conjugation: √-í/ě-í-φ

The thematic suffixes indicated as *-á-* and *-ó-* in the present tense probably take the form *-í-* or *-ě-*

There is no way to discover the underlying accentual specification of the 2<sup>nd</sup> conjugation present-tense suffix *-i-* because there are no athematic 2<sup>nd</sup> conjugation verbs

The vowel of the thematic suffix is either deleted or turns into a glide before vocalic suffixes

### What happens to its accent?

Melvold 1990: stress should shift one syllable to the left

This pattern characterizes five roots, only the first two of which are non-archaic (Gladney 1995:115 lists four: *-koleb-* ‘rock’, *-kolyx-* ‘sway’, *-alk-* ‘crave’, and some archaic derivatives of *-im-* ‘have’ (e.g., *vnimátʲ/vnémʲlʲu* ‘heed’), to which we add the archaic TS variant of *-strad-* ‘suffer’). All but *-im-* ‘have’ are *-a/-i-* verbs

Because this doesn’t work for variant verbs, she hypothesizes retraction

Suppose the accent is just deleted. Suppose we are then left with just the verbal stem with its accentual properties

### 6.1. Variable accentuation of the stem

Accentuation of the stem is not constant across the verbal derivation

#### 6.1.1. Denominal verbalization

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)

- (14) accented nouns
- a. *razžálobʲú/razžálobit* ‘move to pity.1SG/3SG’ (cf. *žáloba/žálobu* ‘complaint’) stem
  - b. *bešú/bésit* ‘enrage.1SG/3SG’ (cf. *béša/bésami* ‘devil.SG.GEN/PL.INS’) variant
  - c. *bomblú/bombít* ‘bomb.1SG/3SG’ (cf. *bómba/bómbu* ‘bomb’) inflection
- (15) post-accenting nouns
- a. *kónčú/kónčit* ‘finish.1SG/3SG’ (cf. *koncá/koncámi* ‘end.SG.GEN/PL.INS’) stem
  - b. *ženú/ženit* ‘marry.1SG/3SG’ (cf. *žená/ženú* ‘wife.NOM/ACC’) variant
  - c. *strujú/struít* ‘stream.1SG/3SG’ (cf. *strujá/strujú* ‘stream.NOM/ACC’) inflection
- (16) unaccented nouns
- a. *kníážu/knʲázit* ‘reign.1SG/3SG’ (cf. *knʲáza/knʲazjámi* ‘prince.SG.GEN/PL.INS’) stem



- b. *poručú/porúčit* ‘entrust.1SG/3SG’ (cf. *ruká/rúku* ‘hand.NOM/ACC’) variant  
 c. *boronú/boronít* ‘harrow.1SG/3SG’ (cf. *boroná/bóronu* ‘harrow.NOM/ACC’) inflection

There are generalizations (e.g., verbs derived from nouns containing post-accenting suffixes have stem-final stress), but they are not reliable:

- (17) a. *ribák, ribaká* ‘fisher’ → *ribáčiti* ‘to fish’  
 b. *slésari, slésarěj* ‘metalworker.SG.NOM/PL.GEN’ → *slesáriti* ‘be a metalworker’

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 → inherited stress on the stem
2. recessive stem → stress after the stem (on *-i-*)
3. recessive stem with retraction → stress on the final vowel of the stem
4. recessive stem with present-tense retraction → 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, like (17)

### 6.1.2. Variable thematization

For roots and stems that allow more than one thematic suffix, more than one accentual pattern may arise:

Many *-nu-* verbs bearing stress on the stem have imperfective variants in stressed *-aj-* (e.g., *písknuti* ‘to give a squeak’/ *piščáti* ‘to squeak’). As this imperfective allomorph is dominant, such examples show nothing

- (18) *pizdá/pizdú* ‘cunt.NOM/ACC’  
 a. *pizžú/pizdít* ‘bullshit.1SG/3SG’ (2<sup>nd</sup> conjugation suffix *-ě-*) 1sg  
 b. *pízžu/pízdit* ‘steal.1SG/3SG’ (2<sup>nd</sup> conjugation suffix *-i-*) stem
- (19) *-gljad-* ‘look’<sup>1</sup>  
 a. *gljánu/gljánet* ‘will peep’ (1<sup>st</sup> conjugation suffix *-nu-*) stem  
 b. *vzgljánu/vzgljánet* ‘will glance’, *zaglánu/zaglánet* ‘will look in on’, etc. 1sg  
 c. *gljážú/gljádit* ‘look’ (1<sup>st</sup> conjugation suffix *-ě-*) post-stem
- (20) *-krik-* ‘shout’  
 a. *kříknu/kříknet* ‘will give a shout’ (1<sup>st</sup> conjugation semelfactive suffix *-nu-*) stem  
 b. *kričú/kričit* ‘shouts’ (1<sup>st</sup> conjugation suffix *-ě-*) post-stem
- (21) *-pěrd-* ‘fart’ (vulgar)  
 a. *píórdnu/píórdnet* ‘will give a fart’ (1<sup>st</sup> conjugation semelfactive suffix *-nu-*) stem  
 b. *peržú/perdit* ‘farts’ (1<sup>st</sup> conjugation suffix *-ě-*) post-stem

All these thematic suffixes are accented

Accentuation seems to be a property of the entire verbal stem

<sup>1</sup> The fact that the unprefixated semelfactive verb has stem stress (19a), while adding a prefix creates the 1sg pattern (19b) is exceptional. There is no clear difference in meaning, except (19a) is slightly archaic



It is not surprising that the combination of a stem with a thematic suffix is unpredictable from the semantic standpoint, why should it be phonologically predictable?

## 6.2. Constant theme-conditioned root allomorphy

Suppose roots can acquire a specific accentuation pattern in the context of a given theme but afterwards it is constant

Tentative hypothesis:

- unaccented roots give rise to post-stem stress (because the thematic suffix is accented)
- post-accenting roots undergo retraction (cf. Melvold 1990:291)

Retraction could be motivated by clash, but there is still **no explanation why simple vocalic suffixes do not trigger retraction**

Empirical issue: passive past participles

### 6.2.1. Accentuation of passive past participles (PPPs)

Matushansky [to appear] points out that the accentual behavior of PPPs (and infinitives) of athematic verbs provides evidence for one more distinction between stems: unaccentability

This property is diagnosed by final stress in infinitives and PPPs:

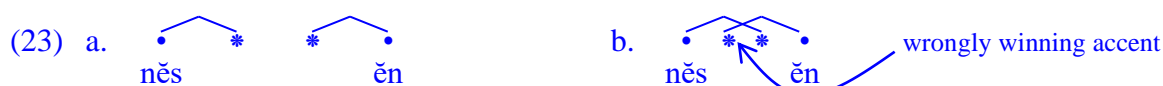
#### (22) Russian accentual verb types

STEM	accented PRES-3SG	accented PRES-1SG	accented PAST-FSG	unaccented PAST-PL	pre-accenting PPP.PL
a. accented 'climb over'	<i>perelézu</i>	<i>perelézet</i>	<i>perelézla</i>	<i>perelézli</i>	<i>%perelézeni</i>
b. unaccented: 'spin'	<i>spríadú</i>	<i>spríadót</i>	<i>spríalá</i>	<i>spríali</i>	<i>spríadeni</i>
c. post-accenting 'carry away'	<i>unesú</i>	<i>unesót</i>	<i>uneslá</i>	<i>uneslí</i>	<i>unesenĭ</i>
d. PA with retraction 'steal'	<i>ukradú</i>	<i>ukradót</i>	<i>ukrála</i>	<i>ukráli</i>	<i>ukrádeni</i>

As the last column in (22) shows, post-accenting athematic stems are characterized by final stress not only in the past but also in PPPs (Feldstein 1986:57, Garde 1998:329-332) (as well as in infinitives, which surface with the ending [tí])

Matushansky [to appear] argues for an additional accentual distinction: unaccentability

The reason is that **the PPP and infinitive suffixes are pre-accenting** and the BAP (1) should give preference to the leftmost accent in the linear sequence:



In (23) the (floating) accents assigned by the root and by the suffix are formalized as an iambic and trochaic feet, respectively. The leftmost head should get priority, but clearly doesn't.

Matushansky [to appear]: to ensure post-stem stress verbs like (22c) should be not only post-accenting, but also unaccentable

Neither dominance nor giving preference to the stem will do the trick

This diagnostic can be extended to thematic verbs



### Stress patterns in the present tense and in the PPP are not correlated

Both the post-stem stress pattern and the 1sg stress pattern can cooccur both with final stress in PPPs, as in (24b') and (24c), and with pre-suffixal stress in PPPs, as in (24b) and (24c').

#### (24) Stress patterns with i-thematic 2<sup>nd</sup> conjugation verbs: present vs. PPP

STEM	PRES.1SG	PRES.3SG	PAST-FSG	PPP-FSG
a. accented: 'sting'	<i>užáľu</i>	<i>užáľit</i>	<i>užáľila</i>	<i>užáľena</i>
b. PRES-final, PPP-re: 'speak'	<i>govor'ú</i>	<i>govor'it</i>	<i>govor'ila</i>	<i>govórena</i>
b'. PRES-final, PPP-final: 'light up'	<i>osvešč'ú</i>	<i>osvet'it</i>	<i>osvet'ila</i>	<i>osvešč'ená</i>
c. PRES-variant, PPP-final: 'enamor'	<i>vl'ubl'ú</i>	<i>vl'úbit</i>	<i>vl'ub'ila</i>	<i>vl'ublená</i>
c'. PRES-variant, PPP-re: 'catch'	<i>lov'ú</i>	<i>l'ov'it</i>	<i>ulov'ila</i>	<i>ul'óvlena</i>

This means that some of the stems that exhibit variant stress are unaccentable

Unaccentable morphemes can be stressed, but only as a last resort (e.g., the PPP suffix is stressed in MSG PPPs, where it is word-final: *osvešč'ón*, *vl'ubl'ón*)

Revithiadou 1999, Alderete 1999: post-accenting morphemes are actually unaccentable (with the accent assigned by a different mechanism)

My unaccentability is different: there are post-accenting morphemes that are not unaccentable

#### 6.2.2. Unaccentability and the variant pattern

Final stress in PPPs and the variant pattern in the present are independent of each other

An unaccentable unaccented stem and an unaccentable post-accenting stem will produce the same result: "dominant post-accentuation"

So maybe the variant pattern is associated with unaccented stems and the stem-final pattern arises with post-accenting ones, or vice versa?

Problems:

- unaccented/post-accenting athematic stems with no variance
- unaccented/post-accenting athematic stems with variance

There are (only) two athematic stems with the variant pattern:

- (25) a. *-pod.ním-* 'raise':  
*pod.nim-ú* 'will raise.1SG'  
*pod.ním-e-t* 'will raise.3SG'  
*pod.n'a-l-á* 'raised.FSG'  
*pód.n'a-l-i* 'raised.PL'
- b. *-mog-* 'be able':  
*mog-ú* 'am able.1SG'  
*móž-e-t* 'is able.3SG'  
*mog-l-á* 'was able.FSG'  
*mog-l-i* 'were able.PL'

(25a) is unaccented in the past, (25b) is post-accenting

There is only one variant verb in the *-a/-o-* class, *stonáť* 'to moan'. While prescriptive grammars place stress on the ending in the 1sg (*stonú*), it is ineffable, as is the present gerund. The imperative (*stoní*) is okay

### Conversely, no thematic stem exhibits accentual variance in the past

#### 6.2.3. Dominance

Making a root dominant does not help



If it is to get rid of the accent introduced by the thematic suffix, we will just end up with the same accentual classes as athematic verbs have

If it is to get rid of the accent introduced by the present tense morpheme, stem-final stress still needs an explanation

#### 6.2.4. Retraction

Halle 1973, 1975, 1997, Melvold 1990: the so-called **neo-acute stems** require a rule of stress retraction (269 nouns in the plural, some adjectives in the long form, etc.)

Given that all non-nominative plural endings are accented (Halle 1997:282), why are some post-accenting stems stressed on the last syllable of the stem?

(26) unaccented ending	accented ending	(accented) plural ending	
kolbas- <b>ú</b>	kolbas- <b>á</b>	kolbás-ami	a-stem
kazak- <b>ú</b>	kazak- <b>á</b>	kazák-ami	ũ-stem
koles- <b>ú</b>	koles- <b>á</b>	kolés-ami	o-stem

Melvold 1990:27: there are 20 unaccented nominal stems subject to the same pattern:

(27) unaccented ending	accented ending	(accented) plural ending	
dúš- <b>u</b>	duš- <b>á</b>	dúš-ami	a-stem
ózer- <b>o</b>	—	ozíor-ami	o-stem

Melvold 1990:26-28 discusses post-accenting nouns with retraction in the singular

Also discusses short-form and long-form adjectives and our variant pattern

Analyses also provided in Revithiadou 1999 and Dubina 2012

Key feature: morphological juxtaposition of singular and plural (Alderete 1999, Butska 2002)

There is no obvious contrast here, except for the phonological one, and retraction should not fail before vocalic suffixes, this makes no sense

### 6.3. Prior proposals

Melvold 1990:291: these roots are post-accenting but marked to undergo retraction in all forms except 1sg (why only there?)

Idsardi 1992:124: retraction is triggered by the present tense marker, which, being deleted in the 1sg, fails to trigger retraction. This means that:

- the imperative (surface [i]) and the present gerund (surface [ja]) suffixes should not contain the present tense suffix either
- potential independent evidence: the present gerund (surface [ja]) suffix doesn't trigger transitive softening (but should it?)

Gladney 1995:114-117 discusses these verbs but does not offer an analysis

Feldstein 2015: retraction happens only with non-vocalic inflectional suffixes (but why?)

### 6.4. Conclusion

If there is some inherent property that variant stems have or fail to have...

- it is not accent placement
- it is not unaccentability (or dominance)
- it is not retraction
- it is morphologically and lexically conditioned, but phonologically sensitive



Some additional factor is required

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