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► To cite this version:

Ora Matushansky. Two BAP violations in Russian verbal stress. Tatiana Bondarenko; Peter Grishin; Anton Kukhto. Formal Approaches to Slavic Linguistics (FASL) 30. The Third MIT Meeting (2021), In press. hal-04383998

HAL Id: hal-04383998

<https://hal.science/hal-04383998>

Submitted on 10 Jan 2024

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TWO BAP VIOLATIONS IN RUSSIAN VERBAL STRESS

Abstract: The Basic Accentuation Principle of Russian (Kiparsky and Halle 1977), associating main stress with the leftmost accent, appears to be violated with two pre-accenting morphemes: the infinitive and the passive past participle (PPP) suffixes: stress is final instead of pre-suffixal. I will first demonstrate that the PPP suffix is unaccentable, and then show that this violation is resolved if the notion of an unaccentable morpheme is also extended to roots.

1. INTRODUCTION: RUSSIAN VERBAL STRESS AND ATHEMATIC STEMS

As is known since at least Garde 1968, Halle 1973 and Zaliznjak 1985, the lexical stress of Russian can be mostly captured by the combination of two assumptions: (a) that every root or affix is accentually specified in one of the four ways in (1) together with (b) the hypothesis about the interaction between these underlying accents in (2).¹ Various formulations of these basic assumptions can be found in Melvold 1990, Gladney 1995, Garde 1998, Alderete 1999, Feldstein 2015, etc.

- (1) a. **Accented morphemes** carry an accent on themselves (open class)
- b. **Post-accenting** morphemes set an accent on the following syllable; the class of post-accenting roots is large (Halle 1973:316 asserts that there are more than 2000 of them) but usually assumed to be closed
- c. **Pre-accenting** morphemes set an accent on the previous syllable: there are no pre-accenting roots
- d. **Unaccented morphemes** carry no accentual specification of their own (closed class estimated to contain more than 400 roots)

If none of the morphemes in the derivation is dominant (i.e., deleting previously introduced accents), stress favors the leftmost accent or, in its absence, syllable:

- (2) **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.

* The inspiration for this work comes, as always, from Morris Halle and owes a lot to his expertise, knowledge, and ideas. I am also grateful to Masha Gouskova, Francesc Torres-Tamarit, and Donca Steriade for discussions and encouragement, to the audiences at *SFL Atelier de phonologie* (March 20, 2019), *Grote Taal dag* 2021 (January 29, 2021), *FASL 30* (May 13-16, 2021), and *UC Santa Cruz phonology group* (June 9, 2021) for their questions, and to the two anonymous reviewers for their detailed comments and very helpful criticism.

Transcriptions below closely follow Russian orthography, meaning that a number of surface processes are not indicated: (a) palatalization before front vowels (/Ci/ → [Cʲi], /Ce/ → [Cʲe]), (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 /ɨ/ (front, IPA ɪ) and /ʉ/ (back, IPA ʊ). The palatals ч (IPA tɕ, see Padgett and Žygis 2007), ш (IPA ɕ), ж (IPA ʒ) and щ (IPA [ɕ:]) are traditionally rendered as č, š, ž and šč.

Besides the traditional gender (F, M, N), person (1, 2, 3) and number (SG, PL) notation, the following **abbreviations** are used: DIM (diminutive), IMPRF (imperfective), INF (infinitive), LF (long form), NMZ (nominalizer), PPP (passive past participle), PRES (present), PRF (perfective), PFX (prefix).

¹ Various theories have been advanced as to the nature of post-accentuation. Thus, Melvold 1990 argues that post-accenting morphemes are accented but subject to a process shifting the accent to the right, Halle 1973 and Alderete 1999 suggest that these morphemes are unaccented and stress is assigned so as to align with the right edge (unaccented morphemes under this view are exceptional; Alderete does not take them into consideration, while Halle introduces another process to take care of them), and Revithiadou 1999 proposes that post-accenting morphemes possess an unlinked (floating) lexical accent. We will not distinguish between these proposals here.

An illustration of this proposal is provided in Table 1, where the three types of stems and two types of suffixes are given, with the positions of the underlying accents (if present) indicated by underlining and the surface stress, by the accent mark over the vowel:

Table 1 (non-final): Accentual interaction in athematic ($\sqrt{\text{T-AGR}}$) verbs: finite forms

		accented PAST-FSG	unaccented PAST-PL	accented PRES-3SG
a.	accented: <i>-lez-</i> ‘climb’	<i>l[́]ez-l-a</i>	<i>l[́]ez-l-i</i>	<i>l[́]ez-e-t</i>
b.	post-accenting: <i>-nes-</i> ‘carry’	<i>nes-l-á</i>	<i>nes-l-í</i>	<i>nes-í-ó-t</i>
c.	unaccented: <i>-pr^íad-</i> ‘spin’	<i>pr^ía-l-á</i>	<i>pr^íá-l-i</i>	<i>pr^íadi-ó-t</i>

Finite forms of Russian athematic verbs consist of three morphemes: the lexical stem, the tense suffix and the agreement ending. Asyllabic morphemes, like the past-tense *-l-* or the third person singular *-t-*, systematically lack an accent, while vocalic suffixes can be either accented (the present-tense suffix, the feminine suffix) or unaccented (the plural suffix).² Accentual invariability across the entire paradigm suggests a stem that is accented (if stress is on it) or post-accenting (if stress is after it), while variable placement of stress is indicative of an unaccented stem: only an unaccented stem can permit the accents to its right to surface as the main stress. This means that the root *-pr^íad-* ‘spin’ is unaccented.

Having established this, we can examine the behavior of stress in the past tense. It is easy to see that indeed the past-tense suffix *-l-* introduces no accent: if it did, stress would appear in the same place in different past-tense forms of one verb. The contrast between the feminine singular ending and the plural ending in the last row of Table 1 shows that *-a* is accented, and *-i* is unaccented.

Turning to the present, we observe only two accentual classes: those with stress on the stem and those with stress on the present-tense suffix. Given the Basic Accentuation Principle, this suggests that the present-tense suffix is accented: if it were unaccented, we would expect either initial stress (if all six person-number endings are unaccented) or accentual variability (if some of them introduce an accent). What we see, however, are two patterns: stem stress (in the first row, where the stem is accented), and post-stem stress (in the other two, where the stem is not accented). Since we know already from the past tense that the last row involves an unaccented stem, the accent should come from the present-tense suffix.

A comparison between present- and past-tense forms demonstrates the existence of one more accentual class (row (d) in the amended Table 1 below). It is characterized by stress *after* the stem in the present tense (like with post-accenting and unaccented stems) and *on* the stem in the past (like with accented stems):³

² The neuter suffix *-o-* is also unaccented, as is the masculine suffix, which is underlyingly *-ŭ-*, a back yer that is never vocalized. When an accent is assigned to a yer in Russian, stress surfaces on the preceding syllable (Halle 1973, Melvold 1990).

³ There is a fifth pattern, characterizing two athematic roots, the post-accenting *-mog-* ‘be able to’ and the unaccented *-im-* ‘have’ with all prefixes that force this root to take the shape *-im-* rather than *-jm-* in the present tense (i.e., all the consonant-final prefixes (*obn^íát^í* ‘to embrace’, *vn^íát^í* ‘to harken’, *podn^íát^í* ‘to raise’, *razn^íát^í* ‘to separate’, *sn^íát^í* ‘to take off’, and *om^íát^í* ‘to take away’) and one vowel-final one (*prin^íát^í* ‘to accept’)). Their accentual pattern distinguishes the first-person singular present-tense form, which is stress-final, from other present-tense forms (which have stress on the stem). This pattern is frequent and productive in thematic verbs, but extremely limited in athematic ones. We will not treat it here but see Matushansky [to appear].

Table 1 (amended): Accentual interaction in athematic ($\sqrt{\text{T-AGR}}$) verbs: finite forms

		accented PAST-FSG	unaccented PAST-PL	accented PRESENT-3SG
a.	accented: <i>-lež-</i> ‘climb’	<i>lež-l-a</i>	<i>lež-l-i</i>	<i>lež-e-t</i>
b.	post-accenting: <i>-nes-</i> ‘carry’	<i>nes-l-á</i>	<i>nes-l-í</i>	<i>nesⁱ-ó-t</i>
c.	unaccented: <i>-prⁱad-</i> ‘spin’	<i>prⁱa-l-á</i>	<i>prⁱá-l-i</i>	<i>prⁱadⁱ-ó-t</i>
d.	retracting: <i>-grⁱz-</i> ‘gnaw’	<i>grⁱz-l-a</i>	<i>grⁱz-l-i</i>	<i>grⁱzⁱ-ó-t</i>

Halle 1973 and Melvold 1990 treat such stems as underlyingly post-accenting yet subject to a morphologically conditioned stress-retracting rule applying in the past. Independent evidence for such a rule comes from nominal stress, where some nouns that have systematic post-stem stress in the singular exhibit stem-final stress in the plural.⁴

While implementations may vary from theory to theory (for comprehensive non-generativist views see Garde 1968, 1998 and Zaliznjak 1967, 1985), the accentual system of Russian lexical stress is uncontroversially analyzed as a combination of accentual properties of morphemes (which can be accented, pre-accenting, post-accenting and unaccented), the Basic Accentuation Principle (henceforth, BAP) and retraction processes linked to certain roots in certain contexts. We will now see that the BAP (2) breaks down with two verbal morphemes: the infinitive suffix *-tⁱ-* (allomorph *-ti-*) and the passive past participle suffix *-ěn-* (allomorphs *-t-* and *-n-*).

2. INFINITIVAL STRESS

Our purpose in this section is twofold: (a) to show that the infinitive suffix *-tⁱ-*/*-ti-* introduces an accent on the syllable before it and (b) to demonstrate that this accent does not interact as expected with the root accent of athematic verbs.

More specifically, we are concerned with the interaction of the infinitive suffix *-tⁱ-*/*-ti-* with the class of post-accenting verbs (row (b) in Table 1) listed in (3)-(4). While in (3) the infinitive suffix is stressed and realized as *-tⁱ-*, in (4) the velar-final roots force the deletion of [t] and subsequent mutation of the velar yielding stem stress and the ending [ǂ]. Together the post-accenting verbal roots in (3) and (4) form by far the largest accentual group among athematic verbs.⁵

(3) post-accenting regular

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- a. 17 regular dental-final stems: *blⁱustⁱ* ‘to guard’ (*-blⁱud-*), *brestⁱ* ‘to plod’ (*-brěd-*), *vez^tⁱ* ‘to transport’ (*-věz-*), *vestⁱ* ‘to lead’ (*-věd-*), *gnestⁱ* ‘to oppress, arch.’ (*-gnět-*), *mestⁱ* ‘to sweep’ (*-mět-*), *obrestⁱ* ‘to find’ (*-ob-rět-*), *plestⁱ* ‘to weave, braid’ (*-plět-*), *nestⁱ* ‘to carry’ (*-něs-*), *pastⁱ* ‘to shepherd’ (*-pas-*), *polztⁱ* ‘to crawl’ (*-polz-*), *rassvestⁱ* ‘to dawn’ (*-raz.svět-*), *rastⁱ* ‘to grow’ (*-rost-*), *trⁱastⁱ* ‘to shake’ (*-trⁱas-*), *cvestⁱ* ‘to bloom’ (*-cvět-*), *grⁱastⁱ* ‘to approach, arch.’ (*-grⁱad-*), *gustⁱ* ‘to drone, arch.’ (*-gud-*)
- b. 3 labial-final stems: *jetⁱ* ‘to fuck’ (archaic) (*-jěb-*), *grestⁱ* ‘to row’ (*-grěb-*), *skrestⁱ* ‘to scrub’ (*-skrěb-*)

⁴ The retraction rule can also target the combination of an unaccented stem with an accented suffix, as in fn. 3, or with some adjectival stems discussed by Melvold 1990:194-195.

⁵ I believe the list in (3)-(4) to be the most complete in the existing literature though it does not include verbs with the theme *-a-* in the infinitive, which I treat as thematic. It has four verbs not present in Halle 1973:326: the two archaic non-velar verbs *jetⁱ* ‘to fuck’ (*-jěb-*) and *gustⁱ* ‘to drone’ (*-gud-*), and the regular velar verbs *sečⁱ* ‘to flog’ (*-sěk-*), which Halle mistakenly places into the retracting class, and *zaprⁱáčⁱ* ‘to harness’ (*-za.prⁱag-*). The asyllabic root *-čⁱt-* will be discussed in section 5.5.

- (4) 12 velar-final stems: *tolóčj* ‘to pound’ (-*tolk-/tolok-*), *beréčj* ‘to protect’ (-*berěg-*), *vlečj* ‘to attract’ (-*vlěk-*), *volóčj* ‘to pull’ (-*volok-*), *žečj* ‘to burn’ (-*žg-/žog-*), *pečj* ‘to bake’ (-*pěk-*), *prenebréčj* ‘to neglect’ (-*pre.ne.breg-*), *zapriáčj* ‘to harness’ (-*za.priag-*), *-rečj* ‘to speak’ (-*rěk-*), *sečj* ‘to flog’ (-*sěk-*), *steréčj* ‘to guard’ (-*sterěg-*), *tečj* ‘to flow’ (-*těk-*)

The remaining three accentual types collapse into one in the infinitive: accented, unaccented and retracting stems uniformly show stress on the root (and the infinitive suffix surfaces as *-tʲ*).

Table 2: Infinitival accentual patterns in athematic (√-T-AGR) verbs

		accented PAST-FSG	unaccented PAST-PL	accented PRESENT-3SG	accented INFINITIVE
a.	accented: <i>-lez-</i> ‘climb’	<i>léz-l-a</i>	<i>léz-l-i</i>	<i>léz-e-t</i>	<i>léztʲ</i>
b.	post-accenting: <i>-nes-</i> ‘carry’	<i>nes-l-á</i>	<i>nes-l-í</i>	<i>nesʲ-ó-t</i>	<i>nestʲ</i>
c.	unaccented: <i>-priad-</i> ‘spin’	<i>prʲa-l-á</i>	<i>prʲa-l-i</i>	<i>prʲadʲ-ó-t</i>	<i>prʲástʲ</i>
d.	retracting: <i>-grǐz-</i> ‘gnaw’	<i>grǐz-l-a</i>	<i>grǐz-l-i</i>	<i>grǐzʲ-ó-t</i>	<i>grǐztʲ</i>

We hypothesize, with Halle 1973, that the infinitive suffix is underlyingly *-tʲ* and will argue that it is pre-accenting. Since stress in the infinitive in Table 2 surfaces on the same syllable as in the past-tense plural, which we have shown to involve two unaccented suffixes, the first impression is that the infinitive suffix is also unaccented. However, this impression is misleading and arises from the fact that most athematic roots are monosyllabic. Once longer stems are considered, we can see that the infinitive suffix does introduce an accent.

2.1. Accentuation of the infinitive suffix: unaccented stems and the enclitic *-sja-*

If the infinitive suffix is unaccented, we expect in the infinitive the same stress pattern as in non-feminine singular forms. Two types of longer stems allow us to see that combinations of two unaccented morphemes do not behave as the infinitive does: prefixed stems and reflexive ones.

While normally verbal prefixes, being unaccented (with one exception, *vi-* ‘out of’) and non-cyclic (Melvold 1990:299), do not bear stress, in some unaccented prefixed verbs the initial stress assigned by the BAP shifts to the prefix (Melvold 1990:82). This happens in the past non-feminine forms (5a), but not in the infinitive (6):⁶

- (5) a. *náčal* ‘began.MSG’, *náčalo* ‘began.NSG’, *náčali* ‘began.PL’
óbnʲal ‘embraced.MSG’, *óbnʲalo* ‘embraced.NSG’, *óbnʲali* ‘embraced.PL’
b. *načalá* ‘began.FSG’
obnʲalá ‘embraced.FSG’
(6) a. *načátʲ* ‘begin.INF’
b. *obnʲátʲ* ‘embrace.INF’

Since the BAP predicts initial stress when all morphemes are unaccented, if the infinitive suffix were unaccented, the infinitive would also be uniformly stressed on the prefix.

Further evidence comes from the reflexive enclitic *-sja-*. While normally this enclitic ends up unstressed, with a few stems it is stressed in the past tense, but never in the infinitive:⁷

⁶ In some idiolects the verb *obnʲátʲ* ‘to embrace’ does not allow stress shift to the prefix in the past tense and the stress surfaces on the stem, as in the infinitive, or on the ending. See Kukhto and Piperski 2020 for a discussion of individual-internal variation in the past-tense stress.


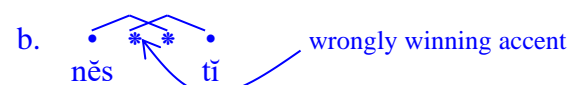
⁷ The verbs *rodítʲsja* ‘to be born’ and *načátʲsja* ‘to start’ are among the very few traces of this pattern in Modern Russian and subject to speaker variation. With other verbs the enclitic is pre-accenting both in its full (*-sja-*) and

- (7) a. *načalsiá* ‘started.MSG’
 b. *načalósj* ‘started.NSG’, *načalísj* ‘started.PL’, *načalásj* ‘started.FSG’
 c. *načátisja* ‘start.INF’

The reflexive counterpart of the unaccented verb *načátj* ‘begin.INF’ shows word-final stress in the past but not in the infinitive. Once again, if the infinitive suffix were unaccented, we would see in the infinitive the same stress pattern as in masculine singular forms, contrary to fact.

We conclude that the infinitive suffix *-tj-* is pre-accenting. One possible reason for this is not inherent specification as pre-accenting (see Revithiadou 1999 for the hypothesis that such an accentual specification does not even exist in Russian), but rather the presence of an abstract high lax (or short) vowel (the front yer [i]), which, being unstressable, normally causes stress retraction (see Halle 1973 and Melvold 1990, among others). Whether this is correct or not, this does not affect our reasoning: it is enough that the accent is introduced by the infinitive suffix and surfaces on the root.

Turning now to post-accenting verbal stems, we see that for the post-accenting verbs in (3) the BAP wrongly predicts stress on the stem: the accent assigned by the suffix, being linearly to the left of that assigned by the post-accenting root, should win (8). Likewise, if the surface position of the stress to the left of the infinitive suffix is caused by a yer, this yer should have triggered the retraction also of the accent assigned by the root.

- (8) a.  b. 

In (8) 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.⁸

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

The combination of a post-accenting morpheme followed by a pre-accenting one is not limited to verbal infinitives. While there exist no other pre-accenting inflectional suffixes, there are quite a few derivational ones. As shown by (9)-(10), where a post-accenting stem is followed by a pre-accenting suffix in the nominal derivation, the BAP gives rise to a correct result (Garde 1998:125): stress falls on the syllable before the suffix.⁹ In (9) this is illustrated for the pre-accenting diminutive suffix *-ik-*: while in (9a) it is preceded by a post-accenting root (the final stress in the citation form is caused by the non-syllabic nominative singular suffix, in any other case the stress surfaces after the stem), in (9b) the post-accenting stem is morphologically complex: the nominalizing actor suffix deriving it, *-ač-*, is not only post-accenting, but also dominant (i.e., deleting all accentual specification from its sister) showing that the pre-accentuation of a later suffix wins even over a dominant post-accenting suffix:

- (9) a. root *koráblj* ‘ship’ (cf. SG.GEN *korabljá*) Garde 1998:125
 [*korablj_ik*] → *koráblik*
 ship-DIM
 small ship

reduced (*-si-*) form, so for many speakers even in (7a) the stress falls on the stem. The choice between the long and reduced forms for this and similar enclitics is discussed by Gouskova 2019.

⁸ The infinitive in *-tj-* is a 19th-20th century innovation in Russian (Graudina, Ickovič and Katlinskaja 1976:198), but well-attested in other Slavic languages.

⁹ For the evidence that these morphemes have the relevant accentual properties, see the works cited. While (9b), as well as some other examples provided by Garde, can be explained by cyclicity (Melvold 1990), it wouldn't work for the simplex root in (9a).

- b. dominant nominalizer *-ač-* (cf. SG.GEN *tolkačá*, from the verb *tolkáti* ‘to push’)
[[*tolk-ač*]-*ik*] → *tolkáčik*
push-NMZ-DIM
small pushboat

In (10) one and the same post-accenting root is followed by another pre-accenting diminutive suffix, *-išk-*, and by a minimally different accented diminutive suffix, *-išk-*, showing double dissociation of the phenomenon from both individual roots and diminutive semantics:

- (10) post-accenting root: *zernó* ‘grain’ (cf. SG.GEN *zerná*) Zaliznjak 1985:86

- a. [[*zern_-išk*]-o] → *ziórniško*
grain-DIM-NSG.NOM
‘a small grain’
b. [[*zern_-išk*]-o] → *zerniško*
grain-DIM-NSG.NOM
‘grain’ (affectionate or pejorative)

While it is not impossible that Russian accentuation works differently in verbs and in nouns, providing an example of category-specific phonology (Smith 2011, 2016), a clear argument against treating the BAP as purely nominal as opposed to verbal comes from the secondary imperfective suffix *-iv-*.

2.3. The secondary imperfective

The secondary imperfective suffix in Russian has three allomorphs: *-iv-* (11), *-v-* (12), or zero (13).¹⁰ While the *-v-* and zero allomorphs are post-accenting (stress appears on the theme vowel), the *-iv-* allomorph is pre-accenting: stress always appears on the verbal stem:

- (11) root *-pis-* ‘write’ + *-aj-* *-iv-*
a. *pis-á-ti* ‘to write’
b. *pod-pis-á-ti* ‘to sign.PRF’
c. *pod-pis-iv-a-ti* ‘to sign.IMPRF’
(12) root *-bol-* ‘pain’ + *-e-* *-v-*
a. *bol-é-ti* ‘to be sick’
b. *za-bol-é-ti* ‘to become sick.PRF’
c. *za-bol-e-v-á-ti* ‘to become sick.IMPRF’
(13) root *-sip-* ‘pour’ + *-a-* *-Ø-*
a. *sip-a-ti* ‘to pour (a non-liquid)’
b. *ras-sip-a-ti* ‘to strew.PRF’
c. *ras-sip-Ø-á-ti* ‘to strew.IMPRF’ (note the stress shift)

Crucially, stem-final stress with the *-iv-* suffix is also observed in verbs that have systematic post-stem stress in their perfective form (14)-(15).

- (14) a. *po-sos-á-ti* ‘to suck for a bit’, *po-sosi-ó-ti* ‘s/he will suck for a bit’
b. *po-sás-iv-a-ti* ‘to be sucking for a bit’
(15) a. *po-gliad-é-ti* ‘to glance’, *po-gliad-i-t* ‘s/he will glance’
b. *po-gliád-iv-a-ti* ‘to be glancing from time to time’

¹⁰ The distribution of the three allomorphs cannot be attributed to any of the self-evident factors (Harrington 1967). While Matushansky 2009 argues for a common underlying representation as *-ǔ-*, Tatevosov 2013 provides some evidence that the *-iv-* allomorph differs from the other two both morphosyntactically and semantically.

It could be objected that thematic suffixes, appearing between the verbal stem and tense, are known to be accented and stress placement arises from their deletion before another vowel (a process, independently known to exist in Russian, see Jakobson 1948, Lightner 1965, Kayne 1967, etc.). However, the lack of palatalization in (15b) suggests that the thematic suffix *-e-* is absent in the secondary imperfective of this verb. Stress, however, still appears before the secondary imperfective suffix, showing that *-iv-* is pre-accenting.

Unfortunately (with a single exception, the unaccented root *-krad-* ‘to steal’), this suffix does not combine with athematic stems, including those in (3)-(4). If, however, we combine the secondary imperfective suffix *-iv-* with a verb derived by the verbalizing suffix *-ov/-u-*, which is dominant and post-accenting (Garde 1998:126), the stress surfaces on the stem, showing the same pattern as (9)-(10) and differing from the infinitive suffix:

- (16) a. *rifm-ov -á-ti* (from the accented stem *rifm-a* ‘rhyme’) ‘to rhyme’
 b. *za-rifm-ov -á-ti* ‘to complete rhyming’
 c. *za-rifm-óv -iv-a-ti* ‘to complete rhyming’ (imperfective)

We thus clearly see that it is the infinitive suffix that shows special behavior with respect to the Basic Accentuation Principle and then only with post-accenting verbs (3). To account for this Halle 1973:328 proposes that the verbal roots in (3) bear a special diacritic. While for all other verbs consonantal suffixes (the infinitive suffix *-tí-*, as well as the past tense suffix *-l-*) trigger retraction (his rule of *Metatony*), the verbal stems in (3) are exempt from this rule both in the past and in the infinitive (and as a result, the underlying yer of the latter is lengthened and the suffix surfaces as *-tí-*).

Evidence against this view comes from another suffix whose accent usually surfaces before it. While the same group of verbal roots in (3) overrides this accentual specification as well, it does so in a different way, suggesting that retraction (*Metatony*) is not to blame.

3. PASSIVE PAST PARTICIPLES

The passive past participle (PPP) suffix has three allomorphs: *-t-*, *-n-* and *-ěn-* (Halle 1973, Feldstein 1986, Garde 1998:329-332), whose distribution will not be discussed here. While some athematic verbs take the *-t-* allomorph, all verbs in (3) combine with the *-ěn-* allomorph. I will first show that this allomorph is pre-accenting with unaccented, accented, and retracting roots yet loses to the accent of the post-accenting root. I will then argue that the PPP suffix is not only pre-accenting but also *unaccentable* (i.e., the vowel in it cannot receive an accent), and that, compared to the infinitive, this case constitutes a different though related problem for the BAP.¹¹ Importantly, only the short forms of passive past participles will be considered: as shown by both Halle and Melvold (*op. cit.*), the long-form suffix of adjectives and participles systematically triggers stress retraction.

3.1. Accentuation of the *-ěn-* allomorph

As the contrast between the past tense and the PPP of the unaccented verb *prⁱastí* ‘to spin’ (see also row (c) of Table 3 below) shows, the *-ěn-* allomorph of the PPP suffix also introduces an accent. The variant stress placement in the past tense (17a) shows that the root *-prⁱad-* ‘spin’ is

¹¹ Halle 1973 addresses the stress patterns of PPPs by postulating internal constituent structure excluding the inflection for those stems whose PPPs exhibit stress before the suffix and no such structure for accented post-accenting stems. We will not consider such a solution here.

unaccented. However, in all forms of the passive past participle (17b), stress appears on the stem, i.e., preceding the PPP suffix:¹²

- (17) a. *pr'ál* 'spin.PAST.MSG', *pr'álo* 'spin.PAST.NSG', *pr'áli* 'spin.PAST.PL'
pr'alá 'spin.PAST.FSG'
- b. *spr'áden* 'spin.PPP.MSG', *spr'ádeno* 'spin.PPP.NSG', *spr'ádeni* 'spin.PPP.PL'
spr'ádena 'spin.PPP.FSG'

If the PPP suffix were unaccented, there would be no difference in stress position between the past tense and the PPP.¹³ The PPP suffix, however, behaves like the infinitive suffix in that it reduces the four accentual classes of Russian athematic stems to the same two: stress is stem-final (pre-suffixal) with accented, unaccented, and retracting roots, and falls on the inflection with post-accenting roots. In other words, the accent introduced by a post-accenting root does not appear on the PPP suffix: the PPP suffix is skipped altogether, and the accent is placed on the next syllable (row (b) below).

Table 3: PPP suffix -*ěn*- with athematic verbs

STEM	PRES.1SG	PRES.3SG	PAST.FSG/PL	PPP.FSG	PPP.PL
a. accented 'climb over'	<i>perelézu</i>	<i>perelézet</i>	<i>perelézla/i</i>	% <i>perelézena</i>	% <i>perelézeni</i>
b. post-accenting 'carry away'	<i>unesú</i>	<i>unesiót</i>	<i>uneslá/uneslí</i>	<i>unesená</i>	<i>unesení</i>
c. unaccented: 'spin' (completive)	<i>spr'adú</i>	<i>spr'adót</i>	<i>spr'alá/spr'áli</i>	<i>spr'ádena</i>	<i>spr'ádeni</i>
d. PA with retraction 'steal' (completive)	<i>ukradú</i>	<i>ukrad'ót</i>	<i>ukrála/ukráli</i>	<i>ukrádena</i>	<i>ukrádeni</i>

It should also be noted that the passive past participle of velar-final verbs, like in (4), behaves exactly like the passive past participle of other post-accenting verbs in (3):

- (18) a. *uvliók* 'attract.PAST.MSG', *uvlekló* 'attract.PAST.NSG', *uvleklí* 'attract.PAST.PL'
uvleklá 'attract.PAST.FSG'
- b. *uvlečón* 'attract.PPP.MSG', *uvlečenó* 'attract.PPP.NSG', *uvlečeni* 'attract.PPP.PL'
uvlečená 'attract.PPP.FSG'

The fact that velar-final verbs appear with final stress in the passive past participle shows that their behavior in the infinitive is due to a separate factor (to wit, because they are velar-final, they do not form a complex coda when the yer of the infinitive suffix is left unpronounced (*uvléčj* rather than **uvléčtj* or **uvléktj*), and so there is one less reason to vocalize this yer).

The formal distinction between the PPP suffix and the infinitive suffix can be easily captured by assuming that the former is both pre-accenting and unaccentable,¹⁴ while the latter is just

¹² The prefixes are added to facilitate PPP formation. While they might in general influence the position of the stress both in the past tense and in the PPP (cf. fn. 19 below and also Skachdubova 2021), here they do not.

¹³ We cannot draw support from the polysyllabic verbs in Section 2.1: PPPs are not compatible with the reflexive suffix in principle and those verbs take a different allomorph (*t*) of the PPP suffix anyway.

¹⁴ Can the unaccentability of the PPP suffix be explained if it is -*n*-, with epenthesis caused by the fact that all relevant roots are consonant-final? The answer is probably yes (and this is what Feldstein 1986 argues for), but then the unification of the two nasal allomorphs would be impossible: there is evidence from transitive softening that the vowel of the PPP suffix is underlying for 2nd conjugation verbs.

pre-accenting.¹⁵ For both, however, the accent that they would place on the preceding syllable is overridden by the accent assigned by the root.

3.2. The suppletive verb *idít* ‘to go’

Is it possible that the infinitive suffix is also unaccentable? As the only morpheme to follow it is the extrametrical reflexive clitic, its accent obviously cannot move to the right, so its shift to the left could be a last resort operation and need not indicate different properties. Evidence against treating the infinitive suffix as unaccentable is provided, however, by the dental-final verb ‘to go’. This verb is systematically suppletive (*-id-/-xǐd-*) and has post-stem stress in the infinitive and all finite forms:¹⁶

- (19) a. *-id-*: *id-ú* ‘go-PRES-1SG’, *idi-óšǐ* ‘go-PRES-2SG’, *idi-ót* ‘go-PRES-3SG’...
 id-tí ‘go-INF’
 b. *-xǐd-*: *š-l-á* ‘went-PAST-FSG’, *š-l-í* ‘went-PAST-PL’, *š-l-ó* ‘went-PAST-NSG’,
 šó-l ‘went-PAST-MSG’

The systematic post-stem stress in (19) suggests that the verbal root is post-accenting. While the unprefixing verb is intransitive and thus has no passive past participle, some of its prefixed derivatives are transitive and, given that their stem becomes asyllabic after the final vowel of the prefix and cannot bear stress, their passive past participles pattern in two ways. The verbs *najít* ‘to find’ and *projtí* ‘to pass’ usually exhibit stress on (the last vowel of) the prefix in the PPP (20a), while with the verbs *perejtí* ‘to pass across’, *prevzajtí* ‘to surpass’, and *oboajtí* ‘to pass over’ stress usually surfaces on the PPP suffix (20b), though the distinction is non-rigid: the former can surface with the latter pattern and *vice versa*:

- (20) a. *na.jd-ě-n-ŭ* → *nájden* (also arch. *najd’ón*)
 PFX.go-PPP-MSG.NOM found
 b. *obo.jd-ě-n-ŭ* → *obojd’ón* (also innovative *obójden*)
 PFX.go-PPP-MSG.NOM passed over

In conjugation, stress appears on the prefix only with unaccented verbs in the past tense in the non-feminine forms for those verbs where the prefix is included in the cyclic domain (see Section 2.1). Whether this inclusion happens or not is a matter of lexical variation even for various derivatives of the same root, and we see the same lexical variation in (20). Yet when the prefix is included in the cyclic domain, the accent of the PPP suffix can and does surface on it, while the accent of the infinitive suffix always surfaces only on the suffix. However this phenomenon is analyzed, this is clear evidence against treating the infinitive suffix along the same lines as the PPP suffix. I suggest that stress never surfaces on the prefix in the infinitive (**nájti*, **prójtí*) because the non-unaccentable infinitive suffix can bear the accent of the root, unlike the PPP suffix.

The fact that all the past-tense forms of these verbs are also stress-final shows nothing, as all they are all monosyllabic. While Garde 1998:355 suggests that the root *-xǐd-* is unaccented, the

¹⁵ Revithiadou 1999 proposes that post-accenting morphemes are unaccentable, but bear an associated floating accent, forced to be realized on the next syllable. The PPP suffix shows that such an analysis is incorrect: it is unaccentable but pre-accenting. Conversely, post-accenting morphemes can bear an accent when followed by a pre-accenting suffix (9)-(10). For some further discussion of post-/pre-accentuation and unaccentability as two independent properties see also Section 5.4.

¹⁶ The underlying *-xǐd-* is motivated by the iterative/secondary imperfective counterpart *xodít* ‘to walk’ (with a stem ablaut usual for iterative formation) and the active past participle *šédšij* ‘who walked.MSG’. The mutation of a palatalized [xʲ] to [š] is independently attested (the so-called *velar mutation*), the deletion of the root-final [d] before the past-tense *-l-* is obligatory (cf. Table 2).

lack of stress retraction to the prefix might be taken as tentative evidence against this view. In view of no evidence to the contrary, it would be more parsimonious to hypothesize that both allomorphs are post-accenting.

3.3. PPP-based inflection and derivation

The rightmost two cells of row (b) in Table 3 show that the PPP stem exhibits post-accenting behavior. Two questions arise therefore: what happens to the stress if no further suffixes are attached and what happens if a pre-accenting suffix is.

Answering the first question first, the PPP suffix, while unaccentable, is not unstressable. The distinction is subtle: to be unstressable means to be unable to bear surface stress (as yers are, see also Matushansky [to appear]), whereas to be unaccentable means to be unable to host an accent. An unaccentable morpheme can still end up stressed if it is the last syllable in a word. Thus in the masculine singular, where the gender-number ending (underlyingly the back yer *-ŭ-*) is phonologically null, stress surfaces on the PPP suffix itself (21a).¹⁷ The passive past participle is therefore no different from other post-accenting stems (21b) in this respect. As we will see in the next sections, in further derivation (in suffixed *nomina actionis* and in “long-form” formation) stress may likewise surface on the last syllable of the PPP.

- (21) a. *unes'ón* ‘carried away.MSG’, *unesená* ‘carried away.FSG’ post-accenting PPP
b. *koróli* ‘king.NOM’, *koroliá* ‘king.GEN’ post-accenting noun

The next question is what happens to these post-accenting stems when they are followed by a pre-accenting suffix. For nominal stems the answer is known and shown in (9)-(10) above: the accent placed by the pre-accenting suffix wins over in full accordance with the BAP. For PPP stems the answer is less evident: while on the surface the same result obtains (stress is placed on the PPP suffix), it may arise by a different mechanism.

3.3.1. PPP-based action nominals

As noted by Babby 1993, 1997, Sadler, Spencer and Zaretskaya 1997, Rappaport 2001, and Pazelskaya and Tatevosov 2008, action nominals are derived from passive past participles by the abstract nominalizing suffix *-ij-*. For the verbs in (3) this gives us:

- (22) a. *-vez-* → *vez-ěn-ij-a* → *vezénija*
transport transport-PPP-NMZ-NSG.GEN luck.GEN
b. *-blud-* → *so.blud-ěn-ij-a* → *sobludénija*
guard PFX.guard-PPP-NMZ-NSG.GEN observance.GEN

At first sight this derivation provides us with evidence as to the interaction of the (factually) post-accenting PPP stem and the pre-accenting *-ij-* suffix. However, this suffix is not only pre-accenting, but also dominant: non-deverbal *-ie* nouns are also stressed on the syllable preceding the suffix irrespective of the accentual properties of the stem (for some exceptions see Zaliznjak 1985:108).

- (23) a. *glavá* ‘chapter.NOM’, *glavú* ‘chapter.ACC’ post-accenting
b. *za.glav-ij-o* → *zaglavíja*
for.chapter-NMZ-NSG.GEN heading, title.GEN
(24) a. *óbraz* ‘shape.NOM’, *óbraz-ami* ‘shape-PL.INS’ accented
b. *mnogo.obraz-ij-o* → *mnogoobrázija*
many.shape-NMZ-NSG.GEN diversity.GEN

¹⁷ The e/o variation is due to an independent phenomenon, on which see Lightner 1969, 1972, Boyd 1997:82-84.

The PPP-based nominalization does not show therefore how PPPs interact with pre-accenting suffixes.

3.3.2. Long forms of PPPs

Russian adjectives, PPPs included, may appear in two forms: the short form, which can only be used in the predicate position, and the long form, which can be used everywhere (Babby 1973, 2010, Siegel 1976, Bailyn 1994, Pereltsvaig 2001, etc.). The long-form (henceforth, LF) suffix (underlyingly *-oj-*) can trigger stress retraction (cf. Halle 1973:324, Melvold 1990:194-196). This means that the fact that the long forms of PPPs bear stress on the PPP suffix ((25), for e/o allophony see fn. 17) also says nothing about the derivational behavior of the (factually) post-accenting PPP stem in general:

- (25) a. *-vez-* → *u.vez-ěn-*oj*-ŭ* → *uveziⁱónnĭj*
transport PFX.transport-PPP-LF-MSG.NOM taken away
- b. *-bl'ud-* → *so.bl'ud-ěn-*oj*-ŭ* → *sobl'udiⁱónnĭj*
guard PFX.guard-PPP-LF-MSG.NOM observed

The surface stress on the PPP suffix in (25) may correspond either to the accent of the post-accenting verbal stem or to the accent introduced by the LF suffix, and it is impossible to tell which, as either could be retracted under the influence of the LF suffix.

However, what masculine PPPs, action nominals and LF PPPs all show is that the suffix *-ěn-*, while unaccentable at the cycle when it is merged, can still be assigned stress (and therefore, accent) at the next cycle.

4. OTHER TYPES OF DEVERBAL NOMINALIZATION

The next question is how the post-accenting roots in (3) behave when combined with other, preferably pre-accenting, suffixes. This question is unlikely to receive an answer since these roots are nominalized either as in (22) or by conversion, aka truncating nominalization (26), aka null-derivation. In the latter case many of these roots undergo ablaut and acquire a different accentual pattern:

- (26) *vezⁱtĭ* ‘to transport’ (*-věz-*) → *vozⁱtĭ* ‘to transport, non-directed’ (*-voz-*)
- a. post-accenting with retraction in the singular:
vó^oz, *vó^oza*, *vozⁱtĭ* ‘cart.SG.NOM/SG.GEN/PL.NOM’
- b. accented:
privó^oz, *privó^ozĭ* ‘bringing.SG/PL’
- (27) *vestĭ* ‘to lead’ (*-věd-*) → *vodĭtĭ* ‘to lead, non-directed’ (*-vod-*)
- a. unaccented with retraction to the prefix:
pró^ovod, *pró^ovodĭ* ‘seeing off.SG/PL.NOM’
pró^ovod, *pró^ovoda*, *provodá* ‘cable.SG.NOM/SG.GEN/PL.NOM’
prívod, *prívodĭ* ‘gear.SG/PL.NOM’
- b. accented:
privód, *privódĭ* ‘delivery (of someone).SG/PL.NOM’
- (28) *spasⁱtĭ* ‘to save’ (*-s.pas-*) → *spasáⁱtĭ* ‘to save’ (imperfective) (*-s.pas-*)
- accented:
Spás, *Spásĭ* ‘Savior.SG/PL’

Given that the accented pattern is the most frequent one and others give rise to unpredictable meanings, it can be assumed that the nominalizing suffix involved has autosegmental content (triggering ablaut) and is pre-accenting or triggers retraction by default. In other words, null derivation does not lead to visible violations of the BAP, but this might be because it involves an unusual autosegmental content and is dominant.

As other suffixal nominalizations except those in (22) involve the same ablaut, they could be derived via the same suffix and then their accentual behavior adds nothing new to the picture.

5. PROPOSAL

Summarizing what has been discussed so far, contrary to the BAP, the combination of a post-accenting athematic verbal stem with the pre-accenting infinitive or PPP suffixes yields stress on the suffix. Nothing in the four-way distinction in Table 2 predicts the behavior of the roots in (3).

Three ways of resolving this issue can be envisaged. Firstly, the BAP itself could be incorrect. Alternatively, it is necessary to ensure somehow that the roots in (3) take precedence over suffixes. While Halle 1973:328 introduces a special diacritic blocking the otherwise obligatory retraction of the accent from the infinitive suffix,¹⁸ I will now argue that the very existence of unaccentable morphemes, in combination with a minor modification of the accentual properties argued for in section 1, will be sufficient to derive the infinitive stress as well if it is assumed that the verbal roots with the infinitive in *-ti-* are unaccentable.

5.1. Retracting past-tense roots

I propose that the past-tense suffix *-l-* is, contrary to what has been suggested above, not just unaccented, but also stress-retracting (cf. Garde 1998:333). For accented and unaccented roots this leads to no change in predictions. Post-accenting roots, however, would now be expected to undergo stress retraction in the past and surface with stress on the stem. All 14 such verbs are given in (29); since the roots differ a lot in the prevocalic and preconsonantal positions, both the present- and the past-tense allomorphs are provided in parentheses:¹⁹

(29) Retracting roots

14

peti ‘to sing’ (*-poj-/pe-*), *biti* ‘to beat’ (*-bj-/bi-*), *vitī* ‘to weave’ (*-vj-/vi-*), *šiti* ‘to sew’ (*-šj-/ši-*), *rasplati* ‘to crucify’ (*-ras.pn-/ras.pia-*), *žati* ‘to reap’ (*-žn-/ža-*), *žati* ‘to press’ (*-žm-/ža-*), *mīati* ‘to knead’ (*-mn-/m’a-*), *grizti* ‘to gnaw’ (*-griz-*), *pasti* ‘to fall’ (*-pad-*), *krasti* ‘to steal’ (*-krad-*), *proserēti* ‘to extend’ (*-pro.str-/pro.st’or-*), *terēti* ‘to rub’ (*-tr-/t’or-*), *striči* ‘to cut (of hair)’ (*-strig-*)

As a result, post-accenting roots will give rise to the “retracting” pattern in the row (d) in the amended Table 1: post-stem stress in the present and stem-final stress in past. Their PPP and their *-ti-* infinitive would also be correctly predicted by the BAP to bear stress on the final syllable of the stem.

The verbs with the infinitive in *-ti-*, however, are now just as exceptional in the past as in their infinitive and in the PPP: violating the BAP, they systematically surface with final stress even with pre-accenting (infinitive *-tī-*, PPP *-ěn-*) and retracting (past *-l-*) suffixes. I propose that this is due to the fact that these roots are themselves unaccentable.

¹⁸ Garde’s system is very different: he asserts that the infinitive suffix is accented, while the past tense suffix can vary in its accentuation in function of the final consonant of the stem (Garde 1998:333; though his empirical generalizations turn out to be incorrect: there are dental-final stems in all accentual groups). The final-stress roots in (3)-(4) are unaccented for him, as are the retracting roots in (29) (which nonetheless become accented in the past and in the infinitive). Our unaccented roots he also treats as unaccented, and I have been unable to find the discussion of why the infinitive suffix sometimes is stressed and sometimes isn’t. Finally, the roots *-mog-* ‘be able to’ and *-im-/n’a-* ‘have’ (see Section 5.4) are the only ones he specifies as post-accenting.

¹⁹ Some of these roots are variably specified across idiolects and even speaker-internally. Thus in derivatives the root *-vī[j]-* ‘to weave’ can be both stress-final (*razvilásj/razvilísj* ‘develop.PAST.F/PL’) or accented (*zavílasj/zavílísj* ‘curl.PAST.F/PL’). A possible rationale can be found in Kukhto and Piperski 2020.

5.2. Unaccentable roots

If the roots in (3) are unaccentable, just like the PPP suffix *-ěn-*, with unaccented and accented suffixes they will behave as regular post-accenting roots, but with the three suffixes in question they will appear to violate the BAP as required.

Thus when the retracting suffix *-l-* attempts to place the accent of a post-accenting root on the root-final syllable, this would fail. As a result, the stem consisting of an unaccentable root and of *-l-* becomes post-accenting. If the number-gender ending following *-l-* is syllabic (i.e., the plural *-i*, the feminine *-a*, or the neuter *-o*), stress will surface on the ending. If the ending is non-syllabic (the masculine *-ŭ*), stress will end up on the syllable preceding it, i.e., on (the final syllable of) the root. We obtain the systematic final-stress pattern characterizing the verbs in the row (c) in the amended Table 1.

While the unaccentable suffix *-ěn-* introduces its own accent to its left, this will not affect the outcome: because an unaccentable root will not accept the accent placed on it by the suffix and neither will the suffix itself, the constituent consisting of the verbal root and *-ěn-* becomes post-accenting. As before, stress will surface on the syllabic ending if available (the plural *-i*, the feminine *-a*, the neuter *-o*), and on (the final syllable of) the root otherwise. Importantly, neither the root nor the suffix “wins” under this view: they both resist the placement of the accent, which ends up on the suffix only when (and because) there is no syllable to assign it to further to the right.

Because the pre-accenting suffix *-tŭ-* is asyllabic, the infinitive is expected to behave the same as the past-tense and PPP masculine forms: the unaccentable root cannot bear the accent, yet there is no syllable after the suffix to assign the accent to and so stress is expected to surface on the final syllable of the root. This is, in fact, what happens with the velar-final roots in (4): we obtain a surface form in [č] and pre-suffixal stress, while in all finite forms stress is final.²⁰

- (30) a. *berěci* ‘preserve.INF’, cf. *berežiót/beregí* ‘preserve.PRES.3SG/PAST.PL’
b. *tolóči* ‘pound.INF’, cf. *tolčiót/tolklí* ‘preserve.PRES.3SG/PAST.PL’

With the roots in (3), however, the infinitive suffix becomes syllabic ([ti]). Not being specified as inherently unaccentable, it can host the accent assigned by the past-accenting root and thus surfaces as stressed [tí].

The difference between the infinitives in (3) and (4) lies in the fact that the final velar in (4) deletes the first consonant of the infinitive: the underlying [g-tŭ] turns into [gí]. The palatalized velar [gʲ] undergoes velar mutation (cf. fn. 16). The infinitive form, as a result, does not contain a consonant cluster, unlike the infinitives in (3), where the combination of the unaccentability of the root and a consonant cluster force the suffixal yer to be vocalized. While there exists a verbal form, the imperative, which surfaces as [i] if stressed or preceded by a consonant cluster and as [ĭ] otherwise (Halle 1973:329, Es'kova 1985, Mołczanow 2011, Antonenko 2012, etc.), I leave the link between the two phenomena and the explanation for the [ti] allomorph for future research.

Finally, “retracting” (i.e., post-accenting regular) verbs (29) cannot be distinguished from non-retracting (i.e., unaccentable) ones (3)-(4) either by the segmental phonology of their root (both classes contain dental-final roots with full vowels) or by their argument structure (both classes contain transitives and unaccusatives) or by their Aktionsart (achievements, accomplishments and activities are attested in both classes, and states in neither). We tentatively conclude that unaccentability is lexically determined.

²⁰ The only other velar-final athematic root, *-strig-* ‘cut (of hair)’, is also post-accenting but retracting. It remains an open question why there are no velar-final athematic stems in the other two accentual classes.

5.3. Distinguishing unaccentability and pre/post-accentuation

Unlike unstressability (lack of a projection to the metrical tier) unaccentability is not absolute: while an unaccentable suffix cannot be assigned an accent, it can bear stress if nothing to its right can. The unaccentability of the PPP suffix was independently argued for by showing that it cannot be assigned either its own accent or the accent introduced by the root. Since the suffix is also pre-accenting, stress surfaces after it only if the root is both itself unaccentable and post-accenting but is otherwise realized on the preceding syllable. We can then show that neither pre-accentuation nor post-accentuation can be reduced to unaccentability.

Indeed, if unaccentability and post-accentuation were the same thing, post-accenting suffixes would all be predicted to behave like the PPP suffix: to be pre-accenting unless preceded by a post-accenting root (which normally cannot shift its accent to the left, though see Section 3.2). Even if the normally pre-accenting behavior of the PPP suffix is due to retraction (rather than unaccentability *per se*), post-accenting roots do not have to be unaccentable (see Section 5.1).

Conversely, if unaccentability and pre-accentuation were the same, pre-accenting suffixes would be expected to become post-accenting after a post-accenting root, which is not the case either, showing that pre-accentuation does not reduce to unaccentability; the same conclusion is suggested by the contrast in the behavior of *-tŭ-* and *-ĕn-* (Section 3.2).

5.4. Unaccentability and accentual class

Given that roots be distinguished by three ways of accent placement (accented, post-accenting and unaccented) and be unaccentable or not, we expect not the four patterns attested in Table 2, but five. Excluding, for obvious reasons, unaccentable accented roots, we expect, in addition to unaccentable post-accenting roots (row (b) in Table 2, lists in (3)-(4)), to have unaccentable unaccented roots as well.²¹

If combined with an accented, pre-accenting or unaccented suffix, an unaccentable unaccented stem is predicted to surface with stress on that suffix (31), which will be the only place where an accent can be placed. However, if an unaccented suffix is followed by an accented one (32a), or a post-accenting suffix is followed by an unaccented one (32b), stress is predicted to surface on this last suffix, and in this respect such a root would be different from a post-accenting one.

- (31) a. accented suffix b. pre-accenting suffix c. unaccented suffix
- | | | | | | |
|------|-----------|------|-----------|------|-------|
| ROOT | SUF | ROOT | SUF | ROOT | SUF |
| * | ([*]) | * | ([*]) | * | [*] |
- (32) a. ROOT SUF SUF
- | | | |
|---|---|-----------|
| * | * | ([*]) |
|---|---|-----------|
- b. ROOT SUF SUF
- | | | |
|---|---|-----------|
| * | * | ([*]) |
|---|---|-----------|

While I know of no evidence for such roots, this could be because neither combination of suffixes in (32) is attested in the verbal domain. There is, however, some minor evidence that the velar root *-mog-* ‘be able to’ is such a root.

While for the majority of athematic verbs the position of stress is constant in the present tense, there are two verbs exhibiting a different pattern: final stress in the 1sg and stem-final stress in

²¹ Accentual dominance of the root cannot be used instead of unaccentability as the driving factor for the attested BAP violations because the combination of dominance with the three types of root accentuation gives rise to too many unattested accentual patterns.

all other forms. This pattern is far more frequent with thematic verbs and is not predicted by anything that we have seen so far.

Table 4: Potential unaccentable unaccented root: *močʲ* ‘to be able to’

		singular-M/F/N	plural
present	1	<i>mog-ú</i>	<i>móž-e-m</i>
	2	<i>móž-e-š</i>	<i>móž-e-te</i>
	3	<i>móž-e-t</i>	<i>mog-ú-t</i>
past		<i>mog/mog-l-á/mog-l-ó</i>	<i>mog-l-í</i>

While Melvold 1990 regards this class as subject to stress retraction in all forms except 1sg, Matushansky [to appear] proposes an alternative account based on induced unstressability and crucially argues that this variant pattern is only attested with unaccented stems. Since thematic stems can also combine with the PPP suffix *-ěn-* and even surface with final stress, as in (33), we expect such cases to involve unaccentable unaccented roots.

- (33) *vlʲubítʲ* ‘to make fall in love’
a. *vlʲublʲú/vlʲúbítʲ* ‘make fall in love.PRES.1SG/3SG’
b. *vlʲublená/vlʲublení* ‘make fall in love.PPP.F/PL’

On the assumption that the variant pattern in (33a) is indicative of an unaccented stem and the final stress in the PPP in (33b), of an unaccentable stem, the verb *vlʲubítʲ* ‘to make fall in love’ should contain an unaccentable unaccented root and the same would be true for the verb *močʲ* ‘to be able to’, which exhibits post-accenting behavior (Table 4) but present-tense variability. As the suffix combinations in (32) are still not found, I leave the verification of this prediction for future research.

5.5. The asyllabic root *-čit-*

When presenting this talk at FASL, I have introduced the bound dental-final root *-čit-* ‘read’ as a post-accenting root without retraction in the past tense. However, since the root is asyllabic, its systematic final stress is also compatible with a different analysis.

Table 5: Asyllabic past-tense root: *-čestʲ* ‘to read’

		singular-M/F/N	plural
present	1	<i>-čt-ú</i>	<i>-čtʲ-ó-m</i>
	2	<i>-čtʲ-ó-š</i>	<i>-čtʲ-ó-te</i>
	3	<i>-čtʲ-ó-t</i>	<i>-čt-ú-t</i>
past		<i>-čó-l/-č-l-á/-č-l-ó</i>	<i>-č-l-í</i>

The finite forms in Table 5 are compatible with a post-accenting, accented, “retracting” or even unaccented root, but the infinitive form (*-čestʲ* rather than *-čestí*) rules out an unaccentable root like those in (3). The list of 17 confirmed accented athematic roots (34) contains no asyllabic roots, which suggests that *-čit-* is not accented either.

(34) Athematic verbs: **accented stems**

17

- a. *lezʲtʲ* ‘to climb’ (*-lez-*), *počítʲ* ‘to go to rest’ (*-po.čij-/po.či-*), *obúť* ‘to put shoes on’ (*-uj-/u-*), *duť* ‘to blow’ (*-duj-/du-*), *gretʲ* ‘to warm up’ (*-grej-/gre-*), *datʲ* ‘to give’ (*-da(d)/-da-*), *estʲ* ‘to eat’ (*-e(d)/-e-*), *sestʲ* ‘to sit down’ (*-sʲad-/se-*), *britʲ* ‘to shave’ (*-brej-/bri-*), *vitʲ* ‘to howl’ (*-voj-/vɨ-*), *kritʲ* ‘to cover’ (*-kroj-/kri-*), *mitʲ* ‘to wash’ (*-moj-/mi-*), *nitʲ* ‘to whine’ (*-noj-/ni-*), *ritʲ* ‘to dig’ (*-roj-/ri-*)
b. potential *-nu-* verbs, dropping the suffix before consonantal derivational suffixes

zastri^ját^j ‘to get stuck’ (-*stri^jan*-/-*stri^ja*-), *det^j* ‘to put away’ (-*den*-/-*de*-), *stat^j* ‘to become’ (-*stan*-/-*sta*-)

Finally, the fact that no prefixal derivative of the root *-čít-* surfaces with a stress on the prefix suggests that the root is also not unaccented.

I conclude that the asyllabic root *-čít-* is post-accenting but not unaccentable, i.e., should be included in the list in (29).

6. CONCLUSION

We have observed that for the 33 athematic verbs in (3)-(4) the Basic Accentuation Principle (2) seems to break down with the pre-accenting infinitive suffix *-tĭ-* and with the pre-accenting unaccentable PPP suffix *-ěn-*: despite the fact that these suffixes are pre-accenting, these forms surface with final stress.

I have argued that to account for this it is necessary to assume that the past-tense suffix *-l-* is not merely unaccented, as argued in Halle 1973 and Melvold 1990, but also retracting, and that the 33 athematic verbs in (3)-(4) involve unaccentable roots. An unaccentable stem cannot host the accent of a pre-accenting suffix, which forces the accent to the right. Stress is thus realized on the final syllable of the word.

The hypothesis advanced in this paper rests on the differentiation between unaccentability and pre- or post-accentuation, which is motivated by the different behavior of the pre-accenting infinitive suffix *-tĭ-* and the unaccentable pre-accenting PPP suffix *-ěn-*.

7. REFERENCES

- Alderete, John. 1999. Morphologically Governed Accent in Optimality Theory. Doctoral dissertation, Rutgers University.
- Antonenko, Andrei. 2012. The inflectional base(s) of the Russian imperative. In *Formal Approaches to Slavic Linguistics 19: The Second College Park Meeting 2010*, ed. by John Frederick Bailyn, Ewan Dunbar, Yakov Kronrod and Chris LaTerza, 1-16. Ann Arbor, Michigan: Michigan Slavic Publications.
- Babby, Leonard. 1993. A theta-theoretic analysis of *-en-* suffixation in Russian. *Journal of Slavic Linguistics* 1, 3-43.
- Babby, Leonard. 1997. Nominalization in Russian. In *Formal Approaches to Slavic Linguistics, The Cornell Meeting 1995*, ed. by Wayles Browne, Ewa Dornisch, Natalia Kondrashova and Draga Zec, 53-85. Ann Arbor: Michigan: Slavic Publications.
- Babby, Leonard H. 1973. The deep structure of adjectives and participles in Russian. *Language* 49, 349-360.
- Babby, Leonard H. 2010. The syntactic differences between long and short forms of Russian adjectives. In *Adjectives: Formal analyses in syntax and semantics*, ed. by Patricia Cabredo Hofherr and Ora Matushansky, 53-84. Amsterdam: John Benjamins.
- Bailyn, John. 1994. The syntax and semantics of Russian long and short adjectives: an X'-theoretic account. In *Formal Approaches to Slavic Linguistics. The Ann Arbor Meeting*, ed. by Jindřich Toman, 1-30. Ann Arbor, Michigan: Michigan Slavic Publications.
- Boyd, Michael S. 1997. Palatalization and coronalization in Russian and Czech: A non-linear approach. Doctoral dissertation, Ohio State University: Columbus, OH.
- Es'kova, N. A. 1985. К морфологии русского императива (Форма второго лица единственного числа) [On the morphology of the Russian imperative (the second-person singular form)]. *Russian Linguistics* 9, 149-163.
- Feldstein, Ronald F. 1986. The Russian verbal stress system. *International Journal of Slavic Linguistics and Poetics* 33, 43-61.

- Feldstein, Ronald F. 2015. The stress of the Russian verb: a new interpretation. Paper presented at *Dr. Ronald Feldstein Web Lecture Series on Slavic linguistics*, 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.
- Gladney, Frank Y. 1995. The accent of Russian verbforms. *Journal of Slavic Linguistics* 3, 97-138.
- Gouskova, Maria. 2019. Phonological words in the syntax and the lexicon: A study of Russian prepositions. *Journal of Slavic Linguistics* 27, 161-212.
- Graudina, Ljudmila Karlovna, Viktor Aleksandrovič Ickovič, and Lia Pavlovna Katlinskaja. 1976. *Грамматическая правильность русской речи. Стилистический словарь вариантов [Grammatical correctness of the Russian speech. A stylistic dictionary of variants]*. Moscow: Nauka.
- Halle, Morris. 1973. The accentuation of Russian words. *Language* 49, 312-348.
- Harrington, Ronald V. 1967. A problem in the morphology of Russian verbal aspect.
- Jakobson, Roman. 1948. Russian conjugation. *Word* 4, 155-167.
- Kayne, Richard S. 1967. Against a cyclic analysis of Russian segmental phonology. Ms., MIT.
- 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, 209-238. Los Angeles: University of Southern California.
- Kukhto, Anton, and Alexander Piperski. 2020. Lexical stress variation and rhythmic alternation in Russian: A pilot study. *Linguistic Variation* 20, 33-55.
- Lightner, Theodore M. 1965. Segmental Phonology of Contemporary Standard Russian. Doctoral dissertation, MIT.
- Lightner, Theodore M. 1969. On the alternation e~o in Modern Russian. *Linguistics* 54, 44-69.
- Lightner, Theodore M. 1972. *Problems in the Theory of Phonology, Vol. I: Russian Phonology and Turkish Phonology*. Edmonton: Linguistic Research, Inc.
- Matushansky, Ora. 2009. On the featural composition of the Russian back yer. In *Studies in Formal Slavic Phonology, Morphology, Syntax, Semantics and Information Structure. Proceedings of FDSL 7, Leipzig 2007*, ed. by Gerhild Zybatow, Uwe Junghanns, Denisa Lenertová and Petr Biskup, 397-410. Frankfurt: Peter Lang.
- Matushansky, Ora. [to appear]. Russian verbal stress retraction as induced unstressability. In *Advances in formal Slavic Linguistics 2022*, ed. by Berit Gehrke, Denisa Lenertová, Roland Meyer, Daria Seres, Luka Szucsich and Joanna Zaleska. Berlin: Language Science Press.
- Melvold, Janis. 1990. Structure and stress in the phonology of Russian. Doctoral dissertation, MIT.
- Mołczanow, Janina. 2011. An OT analysis of the Russian imperative. In *Generative Investigations: Syntax, Morphology, and Phonology*, ed. by Piotr Bański, Monica Opalińska, Beata Łukaszewicz and Joanna Zaleska, 321-337. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Padgett, Jaye, and Marzena Żygis. 2007. The evolution of sibilants in Polish and Russian. *Journal of Slavic linguistics* 15, 291-324.
- Pazelskaya, Anna, and Sergei Tatevosov. 2008. Отглагольное имя и структура русского глагола [The deverbal noun and the structure of the Russian verb]. In *Исследования по глагольной деривации [Investigations into verbal derivation]*, ed. by Vladimir Plungjan and Sergei Tatevosov, 348-380. Moscow: Jazyki slavjanskix kul'tur.
- Pereltsvaig, Asya. 2001. Syntactic categories are neither primitive nor universal: evidence from short and long adjectives in Russian. In *Formal Approaches to Slavic Linguistics 9: The Bloomington Meeting*, ed. by Steven Franks, Tracy Holloway King and Michael Yadroff, 209-227. Ann Arbor, Michigan: Michigan Slavic Publications.
- Rappaport, Gilbert C. 2001. The geometry of the Polish nominal phrase: problems, progress, and prospects. In *Generative Linguistics in Poland: Syntax and Morphosyntax*

- (*Proceedings of the GLiP-2 Conference held in Warsaw, Poland, 9-10 Dec. 2000*), ed. by Piotr Bański and Adam Przepiórkowski, 173-189. Warsaw: Polish Academy of Sciences.
- 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.
- Sadler, Louisa, Andrew Spencer, and Marina D. Zaretskaya. 1997. A morphomic account of a syncretism in Russian deverbal nominalizations. In *Yearbook of Morphology 1996*, ed. by Geert Booij and Jaap van Marle, 181–216. Dordrecht: Kluwer Academic Publishers.
- Siegel, Muffy E. A. 1976. Capturing the Russian adjective. In *Montague Grammar*, ed. by Barbara H. Partee, 293-309. New York: Academic Press.
- Skachedubova, E. S. 2021. Активные процессы в просодической системе русского языка: акцентуация страдательных причастий прошедшего времени [Active processes in the prosodic system of Russian: the accentuation of passive past participles]. *Русский язык в научном освещении* [*The Russian language in scientific interpretation*] 1, 178–191.
- 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, 1-25. London: Blackwell.
- Smith, Jennifer L. 2016. Segmental noun/verb phonotactic differences are productive too. *Proceedings of the Linguistic Society of America* 1, 1-15.
- Tatevosov, Sergei. 2013. Множественная префиксация и ее следствия (Заметки о физиологии русского глагола) [Multiple prefixation and its consequences. Remarks on the physiology of Russian verb]. *Вопросы языкознания* [*Questions of linguistics*] 2013, 42-89.
- Zaliznjak, A. A. 1967. *Russkoe imennoe slovoizmenenie*. Moscow: Nauka.
- Zaliznjak, A. A. 1985. *От праславянской акцентуации к русской* [*From Proto-Slavic accentuation to Russian one*]. Moscow: Nauka.