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BALTO-SLAVIC LONG VOWELS

In *Baltistica* 46(1), Miguel Villanueva Svensson presents a defence of the so-called "traditional" view on the development of long vowels in Balto-Slavic, in opposition to the views of the "Leiden school" (see Frederik Kortlandt's "Long vowels in Balto-Slavic", *Baltistica* 21(2)). In *Baltistica* 47(2), Tijmen Pronk replies to Villanueva Svensson's points.

I presented my own views on the matter, albeit in a general setting, in the paper "Syllables, intonations and Auslautgesetze" (see Carrasquer Vidal 2011), and elsewhere. In the following I would like take some of the items discussed by Villanueva Svensson and Pronk and hold them against my own interpretation of the facts, which differs both from the Leiden and the "traditional" views.

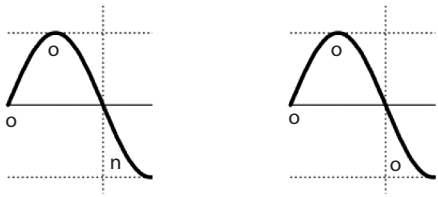
A short summary of my basic position, where **V** stands for a (short) vowel, **V̄** for a long vowel, **H** for a laryngeal, **D** for a PIE media, and **R** for a resonant (one of *i/j, u/w*, *m*, *n*, *l* or *r*):

The vowels	
Short	**V**
long acute	**V̄, VH, VD**
long circumflex	**VV, VHV**
The diphthongs	
long circumflex	**VR, V̄R, VHR**
long acute	**VRH, V̄RH**

This agrees with the "traditional" position in that I expect an acute reflex of a PIE long vowel in Balto-Slavic. But, in contrast with the traditional view, I see a long vowel of any origin (**V̄** or **VH**) followed by a tautosyllabic resonant as giving a Balto-Slavic circumflex syllable (unless followed by a tautosyllabic laryngeal).

Nom. sg. of nouns ending in a resonant

Lith. nom. sg. *akmuõ* "stone", *duktẽ* "*daughter*", etc. owe their circumflex accentuation to the lost final resonant:



At least in the proterodynamic forms (*´-ōn*), this had already happened in dialectal PIE (Germanic and Balto-Slavic), see Jasanoff 2013, "A note on the Slavic genitive plural".

In Slavic, the original circumflex vowel was raised in the Auslaut, giving *-y* (*kamy*) and *-i* (*dъkti*). The rarer stems in *-l* and *-w* are represented by Latv. *âbuõls* "apple" and Slav. *žèrāv* "crane"(**h₂ábōl* and **ĝérHōu*).

A *t*-stem like Lith. *mė́nuõ* "month, moon" (< **meh₁nōts*) was reshaped after the more frequent resonant stems in *-uõ*. But perhaps we do find the expected acute in Slav. *nogà* < **h₃nógh*^{w}*ōts* "leg, foot", if that is the nominative belonging with acc. **h₃nógh*^{w}*utm̥* > *nȍgъtь* "nail"[1].

I cannot agree with Villanueva Svensson's "tacit" rejection of well-established forms such as *o*-stem dat. sg. **-o-ei* > **-ōi*, although of course everybody agrees on the circumflex character of the ending[2]. The Lith. *ā*-stem acc. sg. *-ą* < **-ām* < **-ah₂m*, inexplicably unaffected by Saussure's law in the traditional view, is naturally circumflex in my scheme of things.

The acc. pl., which is acute in Lithuanian and has long vocalism in Slavic, and the *o*-stem ins. pl. are special cases. Apparently, the resonant in the endings *-ns* and *-js* did not make a diphthong with the preceding vowel, and the cluster as a whole caused (acute) lengthening of the preceding vowel, independently in (at least) Baltic, Slavic and Indic.

o-stems

acc. pl. **-oj-ms*(?)	>	**-ōns*	> Lith. **-ōs* > *-ùs*
			Slav. **-ūnh* > **-ūN* > *-y*
ins. pl. **-oj-s* >			Lith. **-āis* > *-aĩs*
			Slav. **-ujh* > **-ūjh* > **-ū(h)* > *-y*

[1] Slav. *vodà* "water" remains a problematic form in more than one respect, cf. Lith. *vánduo*, *vanduõ*.

[2] Note especially the abl. (> gen.) **-oot*, which must have still been uncontracted in PBS (**-õt* would have given Lith. †*-uo*, Slav †*-y*, **-ōt* Lith. †*-ù*, Slav. *-a*). This form, in my opinion, explains all the Balto-Slavic forms beautifully (nominal *´-oot* > Lith. *-o*, Slav. *-a*; pronominal *-éot*, *-óot* > Slav. *-ego*, *-ogo*; Lith. *-io*, *-o*).

ā-stems

acc. pl. *-*ah₂-ms*	>	*-*āns*	>	Lith. *-*ās* > -*às*
				Slav. *- *ūnh* > *-*ūN* > -*y*

i-stems

acc. pl. *-*i-ms*	>	*-*ins*	>	Lith. *-*īns* > *-*īs* > -*ìs*
				Slav. *- *īnh* > *-*īN* > -*i*

u-stems

acc. pl. *-*u-ms*	>	*-*uns*	>	Lith. *-*ūns* > *-*ūs* > -*ùs*
				Slav. *-*ūnh* > *-*ūN* > -*y*

Note that the acc. pl. cannot have been *-*ons* in PIE, as that would have given Lith. †-*às*.

Note that the ins. pl. cannot have been *-*ōjs* in PIE, as that would have given Lith. †-*uis*.

The diphthong -*ai*- gives unstressed -*ai*-, stressed -*íe*-/-*iẽ*- in Lithuanian. Stressed -*aĩ*- must then come from *-*ā́i*-, as in the nominal nom. pl. -*aĩ* (< *-*ah₂* + -*oj*, apparently also proposed independently by Klingenschmitt 2008).

Lithuanian nom. sg. fem. -*ẽ*

I subscribe to the *communis opinio* that the Lith. nom. sg. feminine ending -*ẽ* < *-*ijā*.

Nouns with long root vowel: root nouns?

Latv. *sàls* "salt", *zùoss* "goose", *gùovs* "cow" and *nãss* "nose".

I agree with Villanueva Svensson that Latv. *zùoss*, Lith. *žąsìs*, Slav. *gǫsь* "goose" is irrelevant, although for different reasons (in my view, *g^h*ānsC*- or *g^h*ansC*- would not have made any difference intonationally).

Very relevant, however, is Latv. *nãss*, Lith. *nósis* "nose". As Villanueva Svensson puts it:

> If we start from *g^w*ōu*-, **sāl*-, **nās*-, Kortlandt's general theory on the long vowels would account for Latv. *gùovs*, *sàls*, but not for *nósis*. The traditional view accounts for Lith. *nósis*, but not for Latv. *gùovs*, *sàls*. Similar problems arise if one starts from *g^w*eh₃u*-, **seh₂l*-, **neh₂s*- without applying the rule *-*ĒH*- > *-*Ē*-.

In my theory, all three are explained naturally. The final resonant in *sāl(s) and *g^w*ōus yields circumflex intonation (preserved when the words were transferred to the *i*-stems), and in *nās(s) we have acute intonation before the occlusive. There is no problem and everything is explained. The opposition between *sàls* and *nãss* was indeed, as I recall, what led me to my theory in the first place. The Slavic forms, *solь* and *nosъ*, with a short vowel, continue the PIE accusatives **salm̥* and **nasm̥*.

The accentuation of Lith. *žvėrìs* (nom. pl. *žvérys*), Latv. *zvę̂rs*, Slav. *zvě̑rь* (*ap* c) "wild animal" cannot come from the nominative of a root noun **ĝʰwér*, as that would have given circumflex intonation. We must start from the accusative (**ĝʰwérm̥*) and the oblique (gen. **ĝʰwērés*). The cognates Lat. *ferus*, *fera*, and Gmc. **beran-* "bear" also show oxytone accentuation (with Dybo's shortening law). Pronk's attempt to reconstruct a laryngeal in this word, while simultaneously keeping it out of the claws of Hirt's law (trisyllabic ins. sg. **ĝʰweh₁r̥mí* and the dat., loc. and ins. plural) is ingenious, but lacks the crucial support of some other singular form (e.g. the dative) which is what lends credibility to the partial retention of mobility in the Balto-Slavic reflexes of the *u*-stem **suHnús* "son".

For Slav. *žalь* "sorrow", I would expect **gʷēl·His* with circumflex intonation, as in Lith. *gėlà* (**gʷēl·Hā*). However, if Kapović 2009 is right and the word was originally in *ap* a, it may have been a root noun **gʷēlH(s)*, **gʷēl·Hm̥*, with generalization of the acute of the nominative.

Slav. *rě̑čь* "word" looks very much like root noun. The original acute intonation was eliminated by Meillet's law.

The acute in Slav. *mýšь* "mouse" is probably of laryngeal origin, given de Vaan's derivation of TochB *maścitse* from **mās-* < **mwas-* < **muh₂/₃s-*[3]. The short vowel in Lat. *musculus* "muscle" could then come from Dybo-shortening of pretonic **muHs-kó-*. It would be unexpected, however, to find Dybo-shortening in Ved. *muṣká-* "testicle".

Nouns with long root vowel: vowel stems

Slav. *mę̂so* (Latv. *mìesa*) "meat" is circumflex (**mēm·sóm*) and has become mobile in Slavic. The same goes for other forms with a (long) circumflex in an open root syllable, such as *vâje/jâje* (**ōu̯jóm*) "egg" and *dě̑ti* (**dʰeh₁i-tí-* = **dēi̯-tí-*) "children"[4].

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[3] Although if we accept the same soundlaw for Greek, *μῦς* becomes problematical (one would expect **m(w)ās* or **m(w)ōs*).

[4] One anonymous reviewer objects: "but then what about **deh₂i-wer-* 'husband's brother', which has acute reflexes in Lithuanian and Latvian?". I subscribe to Rasmussen's 1989 theory that the "long diphthongs" developed as follows:

1. when stressed: *éHi-V*, *éi̯H-C*, *éH-CC/C#*;
2. when unstressed: *Hi* before voiced, *H̥* before unvoiced.

The acute in **daih₂-wér-* is then regular (except that perhaps zero-grade might have been expected). In the word **dēi-tí-*, the original zero grade must have been replaced by the (antevocalic) root-shape of the verb **deh₁i-e-* (Latv. *dẽju* 'to suck').

Slav. *trāvà* "grass" and *slā́va* "glory"

In nouns with a long diphthong followed by a vowel-initial suffix or desinence, the intonation of the root depends on whether we are dealing with a *seṭ* or *aniṭ* root. In Slav. *trāvà*, the laryngeal causes the syllabification to be **trōu̯Hā*, and the intonation is circumflex. In Slav. *slā́va*, there is no laryngeal, and we have acute **ḱlō̯wā*. This rule applies, for instance, to Slav. *bělъ* (*ap* b) "white", Latv. *bàls* ~ *bãls* "pale", from **bʰēl̥Ho-* c.q. **bʰāl̥Ho-*, and to a number of other nouns showing circumflex accentuation (Lith. *võlas*, *võras*, *žolẽ́*, Slav. *mě̀lъ, žârъ*, etc.).

What I said above about *slā́va* is contradicted by Pronk's remark:

> all instances of the root **ḱleu-* and (probably analogically) most instances of its extended variant **ḱleu-s-* (with the exception of Lith. *klausýti* and *paklùsti*, Latv. *klàusît*) contain an acute vowel or diphthong in Balto-Slavic. Except if one wishes to posit a lengthened grade for all forms deriving from the root (i.e. for Slavic **slava*, **slaviti*, **sluti*, **sluxati*, **slušati*, **slyšati*,**slyti*), one has to reconstruct a Balto-Slavic root-final laryngeal.

For *slava*, *slaviti*, *slyšati* and *slyti*, a lengthened grade is indeed in order, and a laryngeal is excluded (*slava*) or unnecessary (*slyšati*). As to the forms with *slu-*, perhaps Pronk's next remarks apply(?):

> Verbal roots ending in a glide often behave as if they end in a glide plus laryngeal, irrespective of whether they contained a laryngeal in Indo-European.
>
> Thus, it appears that, apart from **ḱleu-* 'to hear; be known', **smei-* 'to laugh' (Latv. *smiêt* vs. Skt. *-smita-*, Villanueva Svensson 2011a, 22), **kʷei-* 'to observe' (if not from **kʷeh₁-*, Beekes 2010, 1490) and 'to punish, repent' (Cr. *čȁjati* 'to wait', *kȁjati se* 'to repent' if the Slavic acute is not analogical to acute **bajati* 'to tell', **lajati* 'to bark', **majati* 'to wave', *tajati* 'to melt', **gajati*, **grajati*, **rajati* all 'to caw, croak'), **pleu-* 'to float' (Lith. *plū́ti*, Cr. *plȉti* 'to swim, sail' vs. Ru. *plot*, Pl. *płet* 'raft' < **plъtъ*, if not contaminated with the synonymous **pleh₃-*, cf. Derksen 1996, 116–117; 2008, 403, 405–407; LIV, 485, 487), and perhaps **kou-* 'to strike' (Lith. *káuti* 'to beat, hew, slay' vs. Slav. *kъznь* 'skill') and **krou-* 'to pile up, cover' (Lith. *kráuti* 'to pile up', Cr. *krȉti* 'to cover' vs. Gr. κρύπτω 'to cover', ToB *krauptär* 'to gather' with an unexplained labial, cf. Adams 1999, 219f.) obtained a laryngeal in Balto-Slavic. Exceptions are the roots **ei-* 'to go' and **au-* 'to put on footwear', which are generally circumflex [...]

Lith. *núoma* and Latv. *nuõma* "rent" are convincingly connected by Pronk to Slav. *najьmъ* "rent", from **nō* + *h₁m-* "take from". The acute length may therefore be of laryngeal origin.

Slav. *vě́ra* "faith", Lat. *vērus*, OIr. *fír*, OHG *wār* "true", etc. all point to PIE **wēr-* or **weh₁r-*. Villanueva Svensson adduces Anatolian forms like

Hitt. *warri-* "helpful" to derive the Western IE words from PIE **wērH-o/eh₂-* (from a root meaning "to favour, give preference"), instead of **weh₁-ro-*, from an otherwise unknown root **weh₁-*. Pronk objects that the connection with the Anatolian forms is semantically doubtful. For me, the problem is that **wērHeh₂-*, of the *travà*-type, would have given Slav. †*věrà*.

Nouns with an acute diphthong

Slav. *beřmę* "burden" must come from the aniṭ root **bʰer-*, so the acute is a problem here. Deriving from lengthened grade **bʰēr-men-* provides no solution, as V̄R, in my view, is just as circumflex as VR. I would follow Derksen 2008 in reconstructing **bʰerH-men-*, with an unclear and admittedly *ad hoc* laryngeal.

Lith. *varnas*, Slav. *vôrnъ* "raven" versus Lith. *várna*, Slav. *vőrna* "crow".

Derivation of the "crow" word from *vr̥ddhi*-ed **wōrnā* is pointless, and is ruled out by Petit's (2010) observation that lengthened grade **wōrnā* would have given Lith. †*vuornā* > †*(v)urna*. The only way to derive an acute diphthong *-ár-/-őr-* (*-ér-/-ér-*) is if the diphthong was followed by a laryngeal (or a PIE *media*). Greek κορώνη "crow" suggests that the laryngeal was **h₃*, alternating with **w* (Lat. *corvus* "crow"). The Balto-Slavic forms would then continue **wórwos* ~ **worh₃nah₂*, with secondary transfer of the suffix *-no-* to the masculine form.

Latv. *siẽva* "wife", from the root **k̂éi-wo-* "socially close" (Ved. *śéva-* "dear", *śivá-* "friendly", Lat. *cīvis* "citizen", Gmc. **heiwa* "household"), is derived by Villanueva Svensson from a *vr̥ddhi*-derivative **k̂ēi-wah₂*. Again, I fail to see the point, but I can offer no better solution than a laryngeal **k̂éiH-wo-*, following Lubotsky 1988, or an inner-Baltic *métatonie rude* of the type *vìlkė*, *zùikė*, whatever its origin.

Pronominals

Villanueva Svensson presents Slav. *nýne*, *nẽ́kъto*, *nẽ́čъto* as further examples of a PIE lengthened grade yielding an acute in Balto-Slavic. The Baltic parallels are not helpful, but the Slavic words are indeed suggestive.

Dybo (1990, 34–35) reconstructs the oblique forms of the 1/2 pl. personal pronoun in Slavic as:

GL	*nā́sъ, vā́sъ*
D	*nā́mъ, vā́mъ*
I	*nā́mi, vā́mi,*

all with (old) acute.

If this is correct, that is another set of forms with an acute reflecting the PIE lengthened grade (cf. also Lith. acute gen. pl. *mū́sų* and *jū́sų* and related

forms). These forms must have been originally oxytone (**nōsõm*, **nōssú*, **nōsmós*, **nōsmī́s*), and the retraction of the accent, which prevented the loss of a pretonic acute (see the next section), appears to be analogical after the *ā*-stems, which have *ā́mъ, ā́xъ, -ā́mi* by Hirt's law.

This would put Meillet's law and the *jā́blъko/vědrò*-distribution after the Slavic merger of *ā* and *ō*.

The Slavic (sigmatic) aorist

For the sigmatic aorist, with PIE *ē*-grade (likely by Szemerényi's law in the 2/3 sg.), we would expect a Balto-Slavic acute. Like Olander (2009), I explain the loss of the acute as due to it being in pretonic position, where the acute was eventually lost in Slavic. However, I assume no forward shift of the accent, merely retention of original suffix-stress in the PIE thematic *s*-aorist (1sg. **-šóm*, 1pl. **- šómos*), and presumably analogical suffix-stress (after the 1st persons and e.g. the athematic plural) in 2pl. **-sté(s)* and **-šént*. The 2/3 sg. forms were replaced by asigmatic root imperfects (with mobile, i.e. barytone, accentuation).

The motivation of the metatony is clear: there was apparently (cf. Meillet's law) a period in the prosodic history of Slavic where a pretonic acute syllable had to either take the stress (the case of e.g. *jā́blъko* or *bý́ti*), or lose its acuteness (the case of e.g. *vědrò* or of the barytone mobile forms affected by Meillet's law). The sigmatic aorist falls in the latter category.

As to the 2/3sg. aorist of verbs ending in a laryngeal, we can see that the intonation follows that of the past participle in *-l-*. If that is mobile (*bylà*, *dalà*, *lilà*, *pilà*[5]), so is the aorist (*bȳ*, *dâ*, *lī*, *pī*). If it is barytone and acute (*ap* a), as in *bíla* ~ *bí*, *šíla* ~ *ší*, *čű́la* ~ *čű́*, *krýla* ~ *krý*, the two likewise agree.

The Baltic ē-preterit

The origin of the Baltic preterit(s) is disputed. Despite the *ē*-grade of the *ē*-preterit, I find a derivation from the sigmatic aorist highly unlikely, in part because of the circumflex intonation, but mainly because of the lack of *-s-*. I agree wholeheartedly with Pronk when he says that "the long circumflex vowel of *bẽrė* will have to be explained", but unfortunately I have no suggestions to offer at the present time[6].

[5] To explain the mobility, I have suggested that Hirt's law did not work for the sequences **ih$_{2/3}$* and **uh$_{2/3}$* (cf. the development of these sequences in Tocharian and Greek). For *dalà*, I accept Kortlandt's (1975) explanation (zero grade **dh$_3$-ló-* remade after **doh$_3$-*).

[6] Except to note that the parallel with the long vowel in the preterit plural of the Germanic verbs of the same shape *eR-/eC-* (strong classes IV and V) looks too exact to be a mere coincidence.

The Baltic future

Pronk (after Petit 2002) convincingly argues for an inner Lithuanian (Aukštaitian) origin for the metatony in forms like *duõs* "shall give" and *kalbẽs* "shall speak". At the Balto-Slavic stage (if applicable here at all) we only have to deal with (laryngeal) acutes, on which we all agree.

Narten presents

Slav. *sě́kti*, *sě́kǫ* (*ap* c) "cut" < **sēkH*- undoubtedly points to a non-laryngeal acute.

The case of Slav. *-rě́sti*, **-rę́t(j)ǫ*, aor. *-rě́tъ* (*ap* a) "find" is less clear-cut, but Villanueva Svensson's derivation from a Narten present **rēt*- sounds reasonable enough.

Slav. *smъjáti*, **sm̥̂jǫ sę* (*ap* c), Latv. *smiêt*(*iês*), *smeju*(*ôs*), pret. *smêju*(*ôs*) "laugh". The expected acute of **smē-jo*- is seen in Latvian, and is obscured in Slavic by Meillet's law. Reflexes of **sme-jo*-, with short vowel, are also seen in both languages, although not in the same places.

ieškóti

Lith. *ieškóti*, *íeškau* (OLith. *ieszku*) "look for, search", Latv. *iẽskât* "look for lice", Slav. *jьskáti* ~ *iskáti* (*ap* b) "look for, search", connected with Ved. *iccháti*, YAv. *isaiti*, Umbr. *e-iscurent* (< **h₂is-sḱé/ó*-), Arm. *haycʻem*, OHG *eiscon* "ask" (< **h₂ais-sḱe/o*-). On the unexpected acute full grade in Lith. *íeškau*, Villanueva Svensson, with Jasanoff 2003, concludes that "it is thus reasonable to assume that Lith. *íeškau*, Gmc. **aiskōn* etc. reflect a contamination of inherited **h₂is-ské/ó*- and [the Narten desiderative] **h₂éis-s-*/**h₂éis-s-*". Pronk's alternative hypothesis that **Hi*- (and **Hu*-) became glottalized in initial position when stressed is unconvincing: the initial of **h₂is-ské/ó* was obviously not stressed, and the stressed variant **h₂e(:)is(ḱ)*- obviously had no **Hi*-. I find the connection with Lat. *gnōscō*, *pāscō* ~ Hitt. *ganēss*-, *paḫḫs*- highly attractive, and I think such a contamination does indeed underlie the Balto-Slavic forms of the "search" verb. Unfortunately, what it does not explain is the acute in the East Baltic initial syllable (**h₂éis*-s- is circumflex). For that, we should probably turn to Derksen 1996, where an excellent case is made for *métatonie rude* in Baltic *sta*-verbs[7].

Intensives / iteratives

The intensives / iteratives under discussion in Villanueva Svensson and Pronk's articles were also analyzed in my Copenhagen paper "Slavic verbal accentuation":

[7] See now my 2013 paper "Verb incorporation in PIE, and other verbal suffixes" for a possible explanation of the acute, in which the verb *ieškóti* plays a central role.

As noticed by Dybo, the distribution of je-verbs with lengthened root vowel is the following:

ii > *ī*, *uu* > *ū* are in a.p. a (*sýpati, mýkati*, *smýkati*, *týkati*, *sýsati*, *prýskati*, *brýzgati*, *stígati*), while *ee* > *ê*, *aa* > *â* are in a.p. b (*skakáti*, *xapáti*, *xramáti*, *makáti*, *kazáti*, *drěmáti*). The lengthening of the root vowel in these verbs must therefore be relatively ancient, as it follows the PIE distribution, where the only long *ī* and *ū* were acute (from **iH* and **uH*), while *ā*, *ē* and *ō* could be either acute or circumflex. In particular, the formation of these verbs must predate the development **ei* > *î* and Meillet's law (which created new *î*'s and *û*'s (*ŷ*'s)).

There is a category of verbs with lengthened root vowel which could be even older than the *sýpati*/*stígati*/*skakáti*/*drěmáti*-group, at least it is claimed to be of already PIE origin by the makers of LIV. These are causative/iteratives (Slavic *i*/*i*-verbs) with a lengthened root vowel, LIV category 4b (*R(ó)-je-*). If the claim were false, and these formations were of later, early (Balto-)Slavic age, one would expect these verbs (all with root vowel *a*) to fall into a.p. b, like the *skakáti*-verbs. This is not the case. Instead, we find the verbs in question scattered over all three accent paradigms:

gáziti, *páriti* and *váditi* are a.p. a
davíti, *palíti* and *travíti* are a.p. b
sadíti and *gasíti* are a.p. c

I'm not sure about the a.p. of *kaniti*, *račiti* and *mariti*, but they appear to be a.p. b or c (SCr. *kániti kânīm*, *máriti*, *mârīm*, Russ. *рачи́тельный*). Since these verbs are not uniformly a.p. b, they cannot be lengthened *a*'s of the *skakáti*-type (*aa* > *â*). But a lengthened vowel of PIE origin (Dehnstufe) should be reflected in Balto-Slavic as an acute long vowel (*ā* > *á*), and the verbs are not uniformly a.p. a either. The pattern is in fact similar to the one we found above in the *tudáti* and *jé*-verbs with syllabic resonant, except that the starting point here was the root-stressed a.p.: roots of the structure *ōC*, *ōR* remain a.p. a, while roots of the structure *ōRH* become a.p. b. We have:

**g*$^{(w)}$*ṓĝ*^{h}*-eje-* > **gṓz-ī-*; **(s)pṓr-eje-* > **pṓr-ī-*; **wṓd*^{h}*h*$_{1}$*-eje-* > **wṓd-ī-*

as opposed to:

**d*^{h}*ṓuH-eje-* > *dōw-ī́-*; **trṓuH-eje-* > *trōw-ī́-*; **kṓnh*$_{1}$*-eje-* > *kōn-ī́* -

In the first set, the syllabification is *g*$^{(w)}$*ṓ.ĝ*^{h}*eje-*, **(s)pṓ.reje-*, **wṓ.d*^{h}*h*$_{1}$*eje-* with a long rising vowel in the first syllable, which remains in a.p. I (a). In the second set, it is **d*^{h}*ṓu.Heje-*, **trṓu.Heje-*, **kṓn.h*$_{1}$*eje-*, with a long falling diphthong in the first syllable, and therefore a circumflex (cf. the circumflex in **(H)ōu-jóm* > *ôje* > *vâje*/*jâje*, or **mēmsóm* > *mę̂so*). When the laryngeal fell away, the semivowel/resonant was pulled to the next syllable, but the circumflex accentuation stayed. The stress was subsequently advanced by Dybo's law.

One group of verbs I did not mention at the time are the ones Pronk discusses at some length in his reply to Villanueva Svensson: iteratives/inten-

sives with present tense *-*ah₂-je-* (e.g. *birấti*, *birấjǫ*, etc.). The type, like the type *skakấti, skačjǫ̀*, appears to be a Balto-Slavic innovation, and the original intonation of the lengthened vowel may have been identical (*ī*, *ū vs. ê*, *â*). My analysis of these forms is the following: the accentuation in the present tense must have been *-ấje-*, as if by Hirt's law from *-*ah₂-jé-*. Subsequently, the pretonic acute (if any) was lost, as we saw in the case of the *s*-aorist (**bīʔrấʔje-* > **bīrấʔje-*).

***je*-presents**

Villanueva Svensson lists a number of Baltic verbs which derive from a non-acute root and have a long root vowel or diphthong which is attested with acute and with circumflex accentuation (Lith. *répti*, *-répia* beside *-rẽpti*, *-rẽpia* "take, embrace", *grébti* / *grẽbti* "snatch, rake", *trékšti* / *trẽkšti* "crush", *plėšti* / *plẽšti* "tear" (Latv. *plêst*), *žébti* / *žẽbti* "chew", *kvépti* / *kvẽpti* "inhale" (Latv. *kvêpt*), *čiáupti* / *čiaũpti* "close (mouth, lips)", *síekti* / *siẽkti* "try to reach", *plíekti* / *pliẽkti* "beat").

Pronk establishes that all examples have a root ending in an occlusive and have a *je*-present and an *ē*-preterit. He then suggests that the long vowel of these verbs originates in the preterit stem, and that the introduction of the acute can be linked (after Petit 2010, 128) to *je*-presents built from roots ending in a resonant plus laryngeal. These show metatony (e.g. *árti*, *ãria* 'to plough', *skélti*, *skẽlia* 'to split' etc.), due to the loss of the final laryngeal before the suffix *-*je/o-* (Pinault's law). The pattern *acute ē-preterit ~ circumflex je-present* would have become productive in (East) Baltic, affecting the group in question, with root in occlusive.

I find this account plausible, given the fact that most of these verbs don't have clear Narten-nature elsewhere.

Pinault's law (Pinault 1982) is however supposed to be of Indo-European date, which forces me to rethink the analysis I made of zero-grade verbal roots in "Slavic verbal accentuation":

> An interesting case are *tudáti* and *jé*-verbs ending in a syllabic resonant. In theory we would expect the following distribution:
>
> | | **tudáti** | **jé** |
> |---|---|---|
> | **R̥** | -i.Rő | -iR.jő |
> | **R̥H** | -iR.Hő | -iRH.jő |
>
> leading to:
>
> | | **tudáti** | **jé** |
> |---|---|---|
> | **R̥** | -iRő (b) | -iR̂jō (c) |
> | **R̥H** | -iR̂Hō > ìRō (c) | -iRHjő > -iRjő (b) |

That is to say, *tudáti*-verbs become *a.p.* c when they have a *seṭ*-root, and remain *a.p.* b otherwise, while *jé*-verbs remain *a.p.* b when *seṭ*, but become mobile when *aniṭ*. [...].

In practice, we find:

aniṭ		*seṭ*	
a.p. b	**a.p. c**	**a.p. b**	**a.p. c**
tudáti	***jé***	***jé***	***tudáti***
jьmǫ́ jętí ($h_1$em-)*	*mьr̃(j)ǫ mertí (*mer-)*	*dъm(j)ǫ́ dǫ́ti (*dhmeH-)*	*žъrǫ žertí (*g^werh$_3$)*
*čьnǫ́ čętí (*ken-)*	*stьr̃(j)ǫ stertí (*ster-)*	*žьn(j)ǫ́ žę́ti (*g^wjeh$_3$-)*	*nь̃rǫ nertí (*nerH-)*
*žьmǫ́ žętí (*gem-)*		*žьr(j)ǫ́ žьr̃ti (*g^werH-)*	*pь̃rǫ pertí (*spherH-)*
		*tьr(j)ǫ́ tьr̃ti (*terh$_1$-)*	*kl̃ьnǫ klętí (*klenH-)*
			pь̃nǫ pętí ((s)penh$_1$-)*
			*tь̃nǫ tętí (*temh$_1$-)*

If we focus on the *seṭ je*-presents, it is clear that if we accept Pinault's law for PIE, there should be no difference between *seṭ* and *aniṭ* reflexes (which I believe there is, based on the admittedly small sample of verbs). If we don't accept Pinault's law, however, the *seṭ je*-presents should all have been in *ap* a, because of Hirt's law, as I now realize. The mechanism by which Pinault's law worked in these Slavic forms must have been something other than simply dropping the laryngeal. Perhaps we can think of something similar to the Germanic *Verschärfung*? Forms like, say, **dummjǫ́*, **ginnjǫ́*, **girrjǫ́*, **tirrjǫ́* would obviously not have been subject to Hirt's law, but would also not have exhibited circumflex intonation (specifically, the resonant might not have made a diphthong with the preceding vowel, similarly to what we saw above in connection with the acc. pl.).

BALTŲ IR SLAVŲ KALBŲ ILGIEJI BALSIAI

Santrauka

Miguelis Villanueva Svenssonas (*Baltistica* 46(1)) gina vadinamąjį „tradicinį" požiūrį į baltų ir slavų kalbų ilgųjų balsių raidą, priešinamą „Leideno mokyklos" požiūriui (žr. Frederiko Kortlandto straipsnį „Long vowels in Balto-Slavic", *Baltistica* 21(2)). Tijmenas Pronkas (*Baltistica* 47(2)) atsako į Villanuevos Svenssono argumentus.

Šiame straipsnyje autorius aptaria kai kuriuos Villanuevos Svenssono ir Pronko minimus faktus, vadovaudamasis savąja interpretacija, besiskiriančia tiek nuo Leideno, tiek nuo „tradicinio" požiūrio. Straipsnyje aptariama:

- sonantu besibaigiantis daiktavardžių nom. sg.;
- lie. *-ė*;
- daiktavardžiai su ilguoju šaknies balsiu: šakniniai daiktavardžiai?;
- daiktavardžiai su ilguoju šaknies balsiu: balsiniai kamienai;
- įvardžiai;
- slavų (sigmatinis) aoristas;
- baltų *ē* preteritas;
- baltų futūras;
- Narten prezensai;
- *ieškóti*;
- intensyvai / iteratyvai;
- *je* prezensai.

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