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## THE ACCENTUATION OF THE BALTIC PRETERIT (AND OF THE BALTO-SLAVIC $\bar{a}$ -AORIST)

**Abstract.** The Proto-Baltic  $\bar{e}$ -preterit to *ia*-presents was normally accented on the root, as expected from a Balto-Slavic perspective and as borne out by close consideration of Baltic circumflex metatony and related issues. Mobile  $\bar{e}$ -preterits were stressed on the suffix in mobile paradigms: Bl. \**arĕ* ‘ploughed’ (Lith. *ārė*). In its turn Bl. \**arĕ* goes back to early Bl. \**ariĭā*, which implies that Balto-Slavic mobile  $\bar{a}$ -aorists were accented on the aorist marker at least in the 3rd singular: Bl.-Sl. \**ar-ā*.

**Keywords:** Baltic; Slavic; Balto-Slavic; preterit; aorist; accent; metatony; ablaut.

1. It is well known that language development always deletes part of the evidence from our sight, sometimes making the reconstruction of specific forms effectively impossible. In this article I will be concerned with one such case: the accentuation of the Baltic preterit (and, indirectly, of the Balto-Slavic  $\bar{a}$ -aorist). Luckily, even apparently intractable issues may be illuminated by new data, sometimes coming from entirely unsuspected corners. In this case, I submit, the key new element is the phonetics of Baltic circumflex metatony. Although the argument is necessarily convoluted, I hope to show that due consideration of all issues involved allows us to reconstruct part of the accentuation of the Baltic preterit and, perhaps more interestingly, of the Balto-Slavic  $\bar{a}$ -aorist.

The article is structured as follows. I first introduce the basic facts about the Balto-Slavic  $\bar{a}$ -aorist (§2), the Baltic preterit system (§3) and its accentuation (§4). I should note from the outset that the focus here is on stress position, not on morphology. In §5 I discuss the ablaut of the Baltic  $\bar{e}$ -preterit, whose characteristic lengthened grade arose through the same process responsible for Baltic circumflex metatony. This is discussed in §6. I then argue that a better understanding of Baltic circumflex metatony allows us to specify, in part, the accentuation of the Baltic  $\bar{e}$ -preterit and, indirectly, of the Baltic

$\bar{a}$ -preterit and the Balto-Slavic  $\bar{a}$ -aorist (§§7-9). In the conclusions (§10) I highlight some issues raised by the reconstruction of the Baltic preterit defended here.<sup>1</sup>

2. I have discussed the Balto-Slavic  $\bar{a}$ -aorist in detail in Villanueva Svensson (2020), to which global reference is henceforth made. The Indo-European origins of this formation need not deter us here (cf. Villanueva Svensson 2020, 389–397). What matters for present purposes is the position of the  $\bar{a}$ -aorist in the Balto-Slavic verb system.

By late Balto-Slavic the  $\bar{a}$ -aorist was proper to a large subgroup of primary verbs with  $*-e/o-$  or  $*-je/o-$  present: Bl.-Sl. pres.  $*se\check{u}k-e-ti$ , inf.  $*suk-t\bar{i}$ , aor.  $*suk-\bar{a}-t$  ‘twist’ (Lith.  $s\grave{u}kti$ ,  $s\grave{u}ka$ ,  $s\grave{u}ko$ , CS  $s\check{v}kati$ ,  $s\check{u}\check{c}\check{o}$ , aor.  $s\check{v}kax\check{v}$ ), pres.  $*pej\check{s}-e-ti$ , inf.  $*pi\check{s}-t\bar{i}$ , aor.  $*pi\check{s}-\bar{a}-t$  ‘draw’ (Lith.  $pi\check{e}\check{s}ti$ ,  $-ia$ ,  $-\acute{e}$ , OCS  $p\check{v}sati$ ,  $pi\check{s}\check{o}$ , aor.  $p\check{v}sax\check{v}$ ). It was subject to specific Balto-Slavic tendencies (for instance, the  $\bar{a}$ -aorist seems to have been nearly exclusive beside  $je/o-$ -presents to roots ending in a stop or a sibilant), but no specific *Aktionsart* can be attributed to this formation. From a formal point of view, the  $\bar{a}$ -aorist selected zero grade of the root and was paired with a suffixless infinitive stem. The  $*-\bar{a}-$  was non-acute, cf. Lith. 3  $pi\check{r}\check{k}o$ , 1 pl.  $pi\check{r}\check{k}ome$ , 2 pl.  $pi\check{r}\check{k}ote$ , with underlying  $/-\bar{o}-/$ .

Turning to stress position, the development of Baltic and Slavic seems to have rendered its reconstruction a hopeless enterprise. Baltic will be studied below. As for Slavic, the  $\bar{a}$ -aorist fully merged with iteratives and denominatives with second stem in  $-a-$  (OCS denom.  $d\check{e}lati$ ,  $-aj\check{o}$ ,  $-ax\check{v}$  ‘do’, impf.  $s\check{v}-birati$ ,  $-aj\check{o}$ ,  $-ax\check{v}$  ‘collect’). The way this happened need not deter us here. The point to emphasize is that this has rendered Slavic completely silent concerning the prosodic properties of the Balto-Slavic  $\bar{a}$ -aorist. The accentuation of the  $*-\bar{a}-$  of inherited  $\bar{a}$ -aorists like inf.  $*v\acute{e}\check{j}ati$ , aor.  $*v\acute{e}\check{j}ax\check{v}$ ,  $*v\acute{e}\check{j}a$  (pres.  $*v\acute{e}\check{j}\check{o}$  AP a), or inf.  $*b\check{v}r\acute{a}ti$ , aor.  $*b\check{v}r\acute{a}x\check{v}$ ,  $*b\check{v}ra$  (pres.  $*b\check{v}r\check{o}$  AP c) is exactly the same as that of the second stem in  $*-\bar{a}-$ , including its acuteness and the accent curves of mobile aorists. It tells us nothing about the accentuation of the Balto-Slavic  $\bar{a}$ -aorist. For this we will have to rely on

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<sup>1</sup> Conventions for Balto-Slavic and Baltic prosodic features:  $\bar{E}$  = acute,  $\bar{E}$  = non-acute (or simply length, without specification of acuteness),  $\acute{E}$  = lexical stress,  $\grave{E}$  = *enclimomena*. I keep the traditional notation for Proto-Slavic. Other typographical conventions:  $X > Y$  is used when Y derives from X through regular sound change,  $X \gg Y$  when non-trivial non-phonological changes are involved as well.  $X \rightarrow Y$  is used for derivation.

Baltic, which is, generally speaking, far less informative than Slavic as far as verb accentuation is concerned.

3. As is well known, Baltic has only two preterit suffixes:  $*\bar{a}$ - and  $*\bar{e}$ -. In Lithuanian they stand in complementary distribution with each other and are, with few exceptions, fully predictable from the present and/or infinitive stem:<sup>2</sup> the  $\bar{e}$ -preterit is regular beside *ia*-presents (Lith. *veĩkti*, *veĩkia*, *veĩkė* ‘do’) and in the causative-iterative type *sakýti*, *sāko*, *sākė* ‘say’ (where the  $\bar{a}$ -present has replaced a Balto-Slavic  $\bar{i}$ -present, PIE  $*\bar{e}je/o-$ ), whereas the  $\bar{a}$ -preterit is proper to nasal and *sta*-inchoatives (Lith. *lipti*, *liĩpa*, *lipo* ‘stick to’, *viĩsti*, *viĩsta*, *viĩto* ‘turn into’) and to *all* suffixal formations (*aug-ĩnti*, *-ĩna*, *-ĩno* ‘grow (tr.)’, *galv-óti*, *-ója*, *-ójo* ‘think’, *budė-ti*, *-i*, *-ėjo* ‘be awake’, *mel-úoti*, *-úoja*, *-āvo* ‘lie’, etc.). *a*-presents, finally, have both preterits depending on root structure (e.g. *piĩkti*, *peĩka*, *piĩko* ‘buy’ vs. *vėsti*, *vėda*, *vėdė* ‘lead’), the  $\bar{e}$ -preterit being often a demonstrably late innovation (e.g. *mālti*, *māla*, *mālė* ‘grind’, contrast Lith. dial. *mālo*, Latv. *malu*). Thus, there is every reason to believe that the  $\bar{e}$ -preterit originated beside  $*\bar{i}a$ - and  $*\bar{i}$ - presents and later expanded to some subtypes of *a*-presents.<sup>3</sup>

What has just been written points to a very specific historical analysis of the Baltic  $\bar{e}$ -preterit: it goes back to  $*\bar{i}j\bar{a}$  (see below §7 for justification of this form over a theoretically possible  $*\bar{i}j\bar{a}$ ) and is, historically, an  $\bar{a}$ -preterit added to the  $*\bar{(i)}\bar{i}$ - of original presents in  $*\bar{i}a$  and  $*\bar{i}$ .<sup>4</sup> This is not the place to argue at length for this theory, which has always figured among the dominant accounts of the  $\bar{e}$ -preterit. I refer to Villanueva Svensson (2005; 2014, 241f.) for the main arguments, some of which, at any rate, will occupy us below §§5–9. An obvious inference of this view is that at some point Baltic extended the Balto-Slavic  $\bar{a}$ -aorist as the only preterit suffix of the language. The details of the process need not concern us here. In the following section we will examine what we know about the accentuation of the Baltic preterit.

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<sup>2</sup> Schmid (1966; 1967) remain the best treatment of the distribution of the Baltic  $*\bar{a}$ - and  $*\bar{e}$ - preterits.

<sup>3</sup> See Villanueva Svensson (2005) for a more detailed defense of the views assumed here.

<sup>4</sup> An extended discussion of the development Balto-Slavic  $\bar{i}$ -presents in Baltic cannot be attempted here. My views are presented in Villanueva Svensson (2023b, 47–51).

4. The matter, in my view, has not substantially changed since Stang (1966a, 458–467), at least as far data are concerned.<sup>5</sup> Global reference is thus made to Stang’s treatment. Before proceeding further, it will be convenient to make explicit what we are looking for:

1. Information on the general structure of Proto-Baltic (and Proto-East-Baltic) preterit accentuation (on the model of Slavic one expects it to correlate with mobility/immobility in the present stem, but on methodological grounds this cannot be taken for granted);
2. Information on the actual accent curves of mobile preterits (and, ideally, information on the precise accentological behavior of *enclimena*, though this will not be discussed here).

In modern **Lithuanian** *ā*-preterits to non-acute roots are ‘immobile’ (i.e., the stress stays on the root when prefixes are attached, *sùko* – *nesùko*), whereas *ē*-preterits are ‘mobile’ (i.e., the stress shifts to the prefix, *vėdė* – *nėvedė*) except in the type *sakýti*, *sāko* (*sāké* – *nesāké*). Acute roots are always ‘immobile’ (*sprėndė* – *nesprėndė*) and the same holds true for suffixal formations (*minėjo* – *neminėjo*, *kósėjo* – *nekósėjo*). It has always been clear that this system is innovative, just as Lithuanian verb accentuation in general terms.<sup>6</sup> A glimpse at an older, pre-Lithuanian preterit accentuation is provided by agent nouns in *-imas*, which are derivationally dependent on the preterit. In modern Lithuanian primary verbs the suffix *-imas* regularly carries the stress: *dėj-imas* (← *dėti*, *dėda*, *dėjo* ‘put’). Root stress, however, is well represented down to the 19<sup>th</sup> century and, to a lesser degree, in some modern dialects (e.g. *būrimas* ← *būrti*, *-ia* ‘conjure’, standard *būrimas*). After a careful examination of Daukša’s facts Stang (1966a, 463–466) concludes that the two preterits *\*-ē-* and *\*-ā-* could be both mobile and immobile. He further observes that root stress (pointing to inherited immobility) is most prominent with nasal, *-sta* and *-ia* presents, especially those with a lengthened grade preterit. By contrast, suffix stress (pointing to inherited mobility) is at home beside *a*-presents and some subtypes of *ia*- presents.

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<sup>5</sup> Stang’s treatment relied on work by earlier authorities (e.g. Būga 1924, XL–XLII or Skardžius 1935, 65–75, 199–202, 218–220, among others). A detailed *Forschungsbericht* would be out of place here.

<sup>6</sup> See e.g. Jasanoff (2017, 195–199) for a short, but informative treatment of the main issues concerning the redistribution of Balto-Slavic mobility in Lithuanian.

This is by and large expected from a Balto-Slavic perspective (in Slavic *e-* presents are typically mobile, whereas *-ne-* and *-je-* presents are typically immobile), but one must immediately add that Daukša's text contains counterevidence, a non-negligible amount of variation, and abundant examples attested only once or twice (as duly acknowledged by Stang himself). Thus, I doubt much confidence can be put on the evidence provided by the accentuation of nouns in *-imas*. Moreover, this tells us nothing about the actual accent curves of mobile *\*-ē-* and *\*-ā-* preterits.

**Latvian** evidence is limited to acute roots, which have both the level tone (*sēt*, *-ju* 'sow', *buīt*, *-ru* 'conjure') and the broken tone (*bēgt*, *-u* 'run', *aūst*, *-žu* 'weave'). This clearly implies that Latvian inherited mobile and immobile primary verbs. Several problems, however, stand on the way of a *direct* back projection of the Latvian data into Proto-Balto-Slavic or even Proto-Baltic. Even a cursory glance at the evidence assembled in Endzelin (1923, 562–607) quickly reveals that the broken tone predominates in *-a-*, *-sta-* and *-ja-* presents (other present stems do not display enough acute roots). In a Balto-Slavic perspective this is expected in the *-a-* presents, but not in the *-sta-* and *-ja-* presents. The broken tone strongly predominates in *-ja-* presents to roots ending in an obstruent (*diēgt*, *-dzu* 'thread', *plēst*, *-šu* 'tear', *lauzt*, *-žu* 'break', *uōst*, *-žu* 'smell' etc.). In roots ending in a resonant, the level tone predominates with zero grade (*iīt*, *-ru* 'row', *kuīt*, *-lu* 'thresh' etc.) and the broken tone with full grade (*ceīt*, *-lu* 'lift', *dzeīt*, *-ru* 'drink' etc.), though the distribution is less marked than in roots ending in an obstruent. The *a-*presents display the same tendencies. It is evident that Latvian has implemented its own innovations. Moreover, tone variation is far from unknown in Latvian, and only occasionally can we be certain that it reflects something old.<sup>7</sup>

In short, Latvian ends up being as uninformative as Lithuanian, though for different reasons. The only certain conclusion is that, most likely, the two preterit suffixes could be both mobile and immobile. In addition, Latvian, like Lithuanian, tells us nothing about the actual accent curves of mobile preterits.

The corollary of what we have seen so far is that we are forced to rely on **Old Prussian**. This language reflects Balto-Slavic verb accentuation in a

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<sup>7</sup> The clearest case is Latv. dial. pres. *duōdu* : inf. *duōt* (standard Latv. *duōdu*, *duōt* 'give'), cf. Sl. pres. *\*damb* AP *c*, inf. *\*dāti* (< Bl.-Sl. *\*dō-tī* < *\*doH-tī*; Hirt's law). Unfortunately, the preterit *devu* is ambiguous.

more direct way than Lithuanian and Latvian but, as is well known, the texts at our disposal provide a very distorted image of the Old Prussian language. I give the forms reported in the handbooks with their Lithuanian cognates:<sup>8</sup>

1. \**-ē-* preterit:

*ismigē* III 101<sub>13</sub> ‘fell asleep, *užmigo*’;  
*pertraūki* III 101<sub>14</sub> ‘pulled, *užtráukė*’;  
*weddē-din* III 101<sub>17</sub> ‘led (her), *vėdė*’.

2. \**-ā-* preterit:

*ymmi-ts* I 13<sub>5</sub>, *jmmi-tz* I 13<sub>12</sub>, *ymmei-ts* II 13<sub>5</sub>, *ymmey-ts* II 13<sub>12</sub>, *imma* III 75<sub>2</sub>,  
*imma-ts* III 75<sub>7</sub>, 101<sub>13</sub>, 101<sub>17</sub> ‘took (he), *ėmė*’;  
*kūra* III 101<sub>15</sub> ‘created, *kūrė*’;  
*lima-tz* I 13<sub>6</sub>, *lymu-czt* II 13<sub>6</sub>, *līmau-ts* III 75<sub>3</sub> ‘broke (he), *lėmė/lėmė*’;  
*pro-wela-din* I 13<sub>4</sub>, II 13<sub>4</sub> ‘betrayed (him), \**pravýlė*’.

3. \**-āiā*, \**-ēiā*:

*bēi* III 107<sub>4</sub>, *bei* III 107<sub>4</sub>, *bhe* III 93<sub>14</sub> ‘was (without Lithuanian *comparandum*)’;  
*bela* I 11<sub>9</sub>, *bela-ts* I 13<sub>4</sub>, 13<sub>15</sub>, *byla* II 11<sub>11</sub>, *byla-czt* II 13<sub>7</sub>, *bila-ts* II 13<sub>15</sub>, *billai* III  
105<sub>9</sub> (1 sg.), *billa* III 101<sub>9</sub>, 101<sub>17</sub>, 105<sub>1</sub>, 105<sub>6</sub>, *billā-ts* 75<sub>4</sub>, 75<sub>9</sub>, 105<sub>25-26</sub>, 113<sub>2</sub>, *billē* III  
93<sub>14</sub> ‘said (he), *bylėjo*’;  
*dai-ts* I 13<sub>6</sub>, *dai-tz* I 13<sub>14</sub>, *dai-ts* II 13<sub>14</sub>, *day-ts* II 13<sub>6</sub>, *dai* III 75<sub>3</sub>, 75<sub>8</sub>, 101<sub>12</sub> ‘gave  
(he), *dāvė* (\**dúojo*)’;  
*driāudai* III 111<sub>22</sub> ‘forbad; *draūdė* (\**draudójo?*)’;  
*en-deirā* III 107<sub>3</sub> ‘saw, *dyrėjo*’;  
*per-pīdai* III 111<sub>20</sub> ‘brought (without Lithuanian *comparandum*)’;  
*po-glabū* III 113<sub>7</sub> ‘embraced, *paglabójo*’;  
*po-stāi* III 75<sub>2</sub>, *po-stai* III 113<sub>1</sub> ‘became, *pastójo*’;  
*signai* III 105<sub>25</sub> ‘blessed, *žegnójo*’;  
*teikū* III 105<sub>22</sub>, *teiku* 105<sub>23</sub>, 105<sub>24</sub> ‘made, *tiėkė/teikė* (\**teikójo*)’;  
*widdai* III 113<sub>1</sub> ‘saw, *išvėdo*’.

The only accentological inference from these facts I find virtually certain is that, if the preterits of the third group go back to \**-āiā*, \**-ēiā*, as generally assumed, it implies an early shortening \**-āiā*, \**-ēiā* > \**-āiā*, \**-ēiā* (> \**-āiā*, \**-ēiā* > \**-āi*, \**-ēi*, *vel sim.*) which, in turn, implies stress on the root or on the stem (\**-āiā*, \**-ēiā*), but not on the preterit marker (†*-āiā*, †*-ēiā*). This is

<sup>8</sup> E.g. Stang (1966a, 459f.), Smoczyński (2005, 462–467), among others. I cannot here devote the necessary space to discuss Kortlandt’s (2009, 283–285) alternative views on the Old Prussian preterit.

fully in accordance with the East Baltic and Slavic data.<sup>9</sup> One should add, however, that the evidence includes mistakes (pret. *endeirā* : inf. *endeirīt*) and that the status of the forms without final *-i* is uncertain. This implies that it is unclear whether any confusion arose between these forms and real preterits in *\*-ē-* and *\*-ā-*.

As for the latter, if Lithuanian is taken as a guidance we find the following picture. OPr. *weddē* and *pertraūki* are correctly formed (Lith. *vėdė*, *užtrūkė*), but *ismigē*, *kūra* and, probably, *prowela* are not (Lith. *užmigo*, *kūrė*, *\*pravylė*). The case of *lima* I, *lymu* II, *līmau* III is a curious mix. The accented lengthened grade *\*lēm-* of the root points to an *ē*-preterit (Lith. *lēmė*), but the *-u* of *līmu* II/III (if *līmauts* III stands for *\*līmuts*, as generally assumed) points to a relatively old *ā*-preterit (with *\*-ā* > *\*-ū* > *\*-u* after labials and velars). This could suggest that the *ā*-preterit was in the process of being generalized when the Catechisms were composed, a conclusion supported by *ymmi/ymmey* I/II (Lith. *ėmė*) vs. *imma* III (without the change *\*-ā* > *\*-ū* after labial). However, I doubt the data at our disposal allow for such an ambitious conclusion. As for the topic discussed in this article, the root stress of *pertraūki*, *kūra* and *līm(a)u-ts* is in accordance with Lithuanian. The case of *ymm(e)i/imma* is hard to evaluate (contrast Lith. *ėmė*). OPr. *weddē* implies that mobile *ē*-preterits were accented on the preterit suffix, but its testimony is compromised by *ismigē* (with, apparently, wrong preterit suffix and wrong accentuation). We will return to the Old Prussian evidence below §9. For the moment it will be enough to say that the facts of this language are eye-catching, but (predictably) far from fully secure.

5. The result of our discussion in §4 is that Stang (1966a, 466f.) was probably right in most of his conclusions. The two preterit suffixes *\*-ā-* and *\*-ē-* could be both mobile and immobile. Mobility probably correlated with *a*-presents and some *ia*-presents, and immobility with nasal and *sta*-presents and with other *ia*-presents, most likely including those with a lengthened grade preterit. This is of course expected in a Balto-Slavic perspective and, thus, not terribly telling. One must immediately add, however, that the facts are far from unambiguous – and, therefore, that Stang’s correlations of preterit

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<sup>9</sup> Lack of end stress is of course explainable through Hirt’s law, but in this paper I am only concerned with the reconstruction of *late* Balto-Slavic and Baltic forms, not with their origin or motivation.

and present stem mobility cannot be regarded as certain from the Baltic evidence alone. As for the accent curves, OPr. *weddē* points to end stress in at least some forms, but the Old Prussian evidence is inherently insecure.

In short, little can be said about the accentuation of the Baltic preterit, and what we know is of a very general nature and still slightly uncertain. It seems evident that our understanding of this topic is unlikely to advance till new evidence comes to light. The new evidence, I submit, comes from an important feature of the Baltic  $\bar{e}$ -preterit we have not yet discussed: ablaut.<sup>10</sup> In the Baltic *ia*-presents ablaut is fully regulated by root structure:

1. Verbs with a long vowel or a diphthong (schematically: °ERC-, °EUC-, °ĒC-) regularly lack ablaut: Lith. *deñgti, deñgia, deñgė* ‘cover’, *piěšti, piěšia, piěšė* ‘draw’, *tuōkti, tuōkia, tuōkė* ‘marry’. This is the largest groups of verbs of Lithuanian altogether.
2. Verbs with a short vowel (schematically: °ER-, °EU-, °EC-) regularly present a lengthened grade preterit whose tone mirrors that of the infinitive: *nėrti, nėria, nėrė* ‘dive’, *sveřti, sveřia, sveřė* ‘weigh’, *bliáuuti, bliáuuja, bliáuové* ‘bleat’, *lėkti, lėkia, lėkė* ‘fly, run’, *tũpti, tũpia, tũpė* ‘perch’ (note that °EC-verbs have extended the lengthened grade of the preterit to the infinitive stem). Exceptions to the general rule exist, but are very rare (e.g. Lith. *tařti, tãria, tãrė* ‘pronounce’, not †*tōrė*); see below §8.

This is not the place to discuss in detail the development of the Baltic *ia*-presents.<sup>11</sup> A certain degree of variation exists for every root structure, due to different causes. In our present connection the most important one is tone variation in non-ablauting *ia*-presents: about half of the *ia*-presents to acute roots have non-acute variants (*grėbti, -ia, -ė* ~ *grėbti, -ia, -ė* ‘rake’, *sprėsti, -ia, -ė* ~ *sprėsti, -ia, -ė* ‘decide’, *dáužti, -ia, -ė* ~ *daũžti, -ia, -ė* ‘strike’ etc.).<sup>12</sup> The acute is original in all controllable cases. In my view, the ablaut and tonal behavior of the *ia*-presents faces us with three important and, probably, interrelated questions:

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<sup>10</sup> Here I am only dealing with inner-paradigmatic ablaut, not with derivational ablaut. The characteristic zero grade of the Baltic  $\bar{a}$ -preterit (Lith. *piřkti, peřka, piřko* ‘buy’ etc.) is irrelevant in our present connection.

<sup>11</sup> See Villanueva Svensson (2014) for a more detailed treatment.

<sup>12</sup> My informal counting based on the LKŽ yields about 900 *ia*-presents to °ERC-, °EUC-, °ĒC- roots with invariant non-acute, about 150 with invariant acute, and about 150 with acute ~ non-acute variation.

1. The origin of the ablaut invariance of the non-ablauting *ia*-presents to roots in °ERC-, °EUC-, °ĒC-. This may seem a perplexing question. It must be noted, however, that an obviously archaic \*-e-/-Ø- ablaut is well established in the Slavic *je*-presents (OCS *pvsati*, *pišq*, *pvsaxv* ‘write’, *zvdati*, *ziždq*, *zvdaxv* ‘build’, etc.).
2. The origin of the characteristic lengthened-grade preterit of the ablauting *ia*-presents to roots in °ER-, °EU-, °EC-.
3. The origin of the tone variation of original acute roots to non-ablauting *ia*-presents (roots in °ERC-, °EUC-, °ĒC-).

Question 1 is almost never posed in this way. It is, however, a question that necessarily must be posed if a proper Balto-Slavic approach is taken. In part it has already been answered (§3). The creation of the  $\bar{e}$ -preterit entailed adoption of the inherited Balto-Slavic  $\bar{a}$ -aorist to the present stem in the case of \*-*ia*- and \*-*ĩ*- presents: aor. \**piš-ā*- >> \**peĩš-ijā*- on pres. \**peĩš-ia*- (whence, later, inf. \**piš-tī* >> \**peĩš-ti*). Being founded on the present stem, new preterits like \**peĩš-ijā*- adopted the ablaut grade of the present stem as well. Be it as it may, full grade \**peĩš-ijā*- is clearly the starting point for Baltic regardless of how this form came into being.<sup>13</sup>

As for Question 2 (the only one that has received some attention in the literature), the *regularity* of the Baltic lengthened-grade preterit practically proves that we are dealing with a relatively recent development arising through some type of *phonetic* development.<sup>14</sup> This almost automatically implies that the appearance of the lengthened grade was somehow related to the development \*-*ijā* > \*- $\bar{e}$ . This leads us to our next question: the phonetics of Baltic circumflex metatony.

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<sup>13</sup> It is important to stress that \**peĩš-ijā*- (or, if the scenario presented in §6 is not accepted, \**peĩš-īā*-) is the only reasonable starting point for Baltic \**peĩš-ē* (Lith. *pišė*) because this point should not be mixed up with the very origin of early Bl. \**peĩš-ijā*-. While it is clear that \**peĩš-ijā*- somehow replaced Bl.-Sl. aor. \**piš-ā*- (OCS *pvsaxv*) and that the \*-*i(i)*- of \*-*ijā*- must somehow have been taken from the present stem, we still lack a proper scenario of how and why did this happen. A detailed discussion, however, would vastly exceed the limits of this article.

<sup>14</sup> In my view, this argument is so simple and obvious that I would definitely put the burden of proof on scholars assuming that the Baltic lengthened grade preterit goes back to the sigmatic aorist, to “Narten aorists”, or to still some other PIE source.

6. Metatony in Baltic can of course not be addressed at length within the limits of this article. Here we are only concerned with circumflex metatony, and more specifically with the phonetics of the process leading to it. The modern understanding of Baltic circumflex metatony goes back to Stang (1966b), who argued that it arose in two instances of stress retraction:

1. Proto-Baltic retraction from \*-i- in \*-iĭa-, \*-iĭā-, \*-iĭu- (Bl. nom. sg. \*-īs, \*-ē, \*-īus), e.g. Lith. *giřnius* AP 2 ‘millstone cutter’ (← *gırna* AP 1 ‘millstone’), *aũkřtis* AP 2 ‘height’ (← *áuķřtas* AP 3 ‘high’), *žolė* AP 4 ‘grass’ (← *žālias* AP 4 ‘green’).
2. Proto-East-Baltic retraction from \*-ās (Nieminen’s law), e.g. *stōtas* AP 2 ‘build, frame’ (← *stōti(s)* ‘stand up’), *giņklas* AP 2 ‘weapon’ (← *ginti* ‘defend’).

Stang’s retraction from \*-iĭ- has been universally accepted; retraction from \*-ās has not.<sup>15</sup> Here it will be enough to note that metatony in *o*-stems like *stōtas* is far less systematic than in “\*-iĭ- stems” like *aũkřtis* and, accordingly, can be explained as analogical (as is necessarily the case in *ā*-stems like *tvorā* AP 4 ‘fence’ ← *tvėrti* ‘fix, fence’). Besides, cases like *giņklas* can be explained in a completely different way (cf. Nikolaev 1989; Villanueva Svensson 2023a, 207–216).

Subsequent research, on the other hand, has added some new elements. Larsson (2004a; 2004b) showed that retraction from \*-iĭ- produced compensatory lengthening in disyllabic stems: Lith. *gėřis* AP 2 ‘goodness’ (← *gėras* ‘good’), *mōlē* AP 2/4 ‘grinding’ (← *mālti* ‘grind’). Note that nouns affected by this sound law regularly belong to Accentual Paradigm 2 (put otherwise, the result are immobiles with non-acute long vowel). In Villanueva Svensson (2014) I argued that the double effect of the development \*-iĭā > \*-ē is seen in the verb as well: compensatory lengthening gave rise to the lengthened grade *ē*-preterit (Lith. *svėřė* < \**suer-iĭā-*, to *sveřti*, *svėria* ‘weigh’), circumflex metatony to the tone variation *sprėřti*, *-ia*, *-ė* ~ *spręřti*, *-ia*, *-ė* (our Question 3 above §5).

As for the mechanism leading to circumflex metatony *and* compensatory lengthening, I refer to Villanueva Svensson (2023a, 72f.) for criticism of the idea that it was due to stress retraction from \*-iĭ-. The main argument is that compensatory lengthening does not otherwise arise though stress

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<sup>15</sup> The major exception is Derksen (1996). I cannot here discuss this scholar’s acceptance of Nieminen’s law as a source of metatony (criticism in Villanueva Svensson 2023a, 70, 214f.).

retraction, but through segment deletion (CVC. > CV:, less frequently CVCV > CV:C).<sup>16</sup> Another handicap of the stress retraction approach is that the alleged stress of *\*-i̇-* is almost never justified (in the case of the *ē*-preterit, for instance, I can see no justification for the alleged preforms “*\*suer-i̇ā*”, “*\*sprēnd-i̇ā*”). As an alternative, in Villanueva Svensson (2023a, 72f.) I have argued that the *\*-i-* of *\*-i̇-* was weakened to *\*-ə-*, henceforth losing its stressability. If the stress stood on the first *\*-i-*, it was retracted to the preceding syllable (*\*-i̇-* > *\*-ə̇-*). Loss of *\*-ə-* in *\*-ə̇-* > *\*-i̇-* added a component of extra length on the preceding syllable, which, if stressed, was phonologized as compensatory lengthening in the case of original short vowels and as circumflex metatony in the case of acute roots.<sup>17</sup> Schematically:

*\*geri̇as* > *\*gerā̇as* > *\*gērā̇as* > *\*gēṙas* > *\*gēṙis* > *\*gēṙis* (Lith. *gēris*);  
*\*žali̇ā* > *\*žalā̇ā* > *\*žal̇ā̇ā* > *\*žāl̇ā̇ā* > *\*[žāl̇ā̇ē]* > *\*žālē* (Lith. *žolė*).  
*\*bēgi̇as* > *\*bēgā̇as* > *\*bēgā̇as* > *\*bēġas* > *\*bēġis* > *\*bēġis* (Lith. *bėgis*);  
*\*sprēndi̇ā* > *\*sprēndā̇ā* > *\*sprēnḋā̇ā* > *\*[sprēnḋā̇ē]* > *\*sprēndē* (Lith. dial. *spreñdė*).

There are two important points to be retained from this scenario. First, stress retraction *\*-i̇-* > *\*-ə̇-* certainly took place (note the pre-suffixal stress of words like *gelėžius* AP 2 ‘blacksmith’ or *mėlynis* AP 2 ‘blue color’, which, as already stressed by Stang 1966b, can hardly be explained in a different way), but was not involved in the process leading to circumflex metatony and compensatory lengthening. These were due to the loss of *\*-ə-* and only took place when the root vowel was stressed. Stress on the root was probably simply inherited in many cases. In other words, the ultimate antecedent of Lith. *gēris*, *žolė*, *bėgis* may well have been *\*gēṙias*, *\*žāl̇i̇ā̇ā*, *\*bēġi̇as* and not *\*geri̇as*, *\*žali̇ā̇ā*, *\*bēgi̇as* (as I have tacitly favored only in order to avoid too abrupt a break with tradition). Second, the development *\*-i̇ā* > *\*-ē* was not a matter of “contraction” (as usually, but improperly called). It took place after the loss of *\*-ə-* and only affected *\*-i̇ā* (fronting *\*-i̇ā* > *\*-i̇ē* followed by loss of *\*-i̇-* between consonants and front vowels, *\*-i̇ē* > *\*-ē*). If a word inherited *\*-i̇ā*, no circumflex metatony or compensatory lengthening took place (e.g. Bl.-Sl. *\*žēṁi̇ā* ‘earth’ > Lith. *žėmė* AP 2, Sl. *\*zemljā* AP b).

<sup>16</sup> See Kavitskaya (2002).

<sup>17</sup> This account implies that the Balto-Slavic non-acute was a falling tone realized with extra length of the first mora. See Villanueva Svensson (2023a, 56–121) for justification.

The implications of this account for nominal accentuation are still to be worked out in detail. In the next sections we will be concerned with its implications for the accentuation of the Baltic preterit.

7. The Baltic  $\bar{e}$ -preterit is the result of a complicated history. The first step, expansion of the  $\bar{a}$ -preterit as the only preterit suffix of the language, need not deter us here. The second step was adoption of  $*-i(i)-$  from the present stem and (presumably) concomitant adoption of its ablaut grade (§§3, 5):

Bl.-Sl.  $*pis-t\bar{i}$ ,  $*p\acute{e}is-īe/a-$ ,  $*pis-\bar{a}-$  (cf. Sl.  $*pvs\acute{a}ti$ ,  $*pišj\bar{o}$  AP *b*) >> Bl.  $*p\acute{e}is-ti$ ,  $*p\acute{e}is-īa$ ,  $*p\acute{e}is-i\bar{a}$ .

As far as I can see, this change is unlikely to have involved accentual changes. An important question I will have to leave open is the *date* of the abundant transfers of *a*-presents and other verbal classes to the dominant class of the Baltic *ia*-presents. Theoretically, *a*-presents could have kept their mobility after becoming *ia*-presents, but this is far from certain and is only tangentially related to our main topic. Cases like Bl.-Sl.  $*pis-t\bar{i}$ ,  $*p\acute{e}is-īe/a-$ ,  $*pis-\bar{a}-$  → Bl.  $*p\acute{e}is-ti$ ,  $*p\acute{e}is-īa$ ,  $*p\acute{e}is-i\bar{a}$  must have constituted the original core of what was to become the “classical” inflection of the Baltic *ia*-presents (§5). The regularity of the lengthened grade preterit to roots in °ER-, °EU-, °EC- (Lith. *svėrti*, *svėria*, *svėrė* ‘weigh’, *lėkti*, *lėkia*, *lėkė* ‘fly, run’, etc.) has two implications:

1. The preterit marker was  $*-i\bar{i}\bar{a}$  (>  $*-a\bar{i}\bar{a}$  >  $*-i\bar{a}$  >  $*-i\bar{e}$  >  $*-\bar{e}$ ), not  $*-i\bar{a}$ . It is not obvious to me why adaptation of the preterit to the present stem resulted in  $*-i\bar{i}\bar{a}$  and not in  $*-i\bar{a}$ . At any rate, early Baltic pret.  $*-i\bar{i}\bar{a}$  is secured by the available evidence.
2. In a sizable majority of verbs, the stress stood on the root when the development  $*-a\bar{i}\bar{a}$  >  $*-i\bar{a}$  took place. Theoretically, root stress could be due to stress retraction ( $*l\acute{e}k-i\bar{i}\bar{a}$  >  $*l\acute{e}k-a\bar{i}\bar{a}$ ), but it is much simpler to suppose that the stress was on the root from the very beginning ( $*l\acute{e}k-i\bar{i}\bar{a}$  >  $*l\acute{e}k-a\bar{i}\bar{a}$  >  $*l\acute{e}k-i\bar{a}$  >  $*l\acute{e}k-\bar{e}$ ). See below §8 for an argument proving that the stress was indeed on the root.

From a Balto-Slavic perspective the second conclusion is unremarkable (Slavic *je*-presents are normally immobile), but it is surely welcome to have an inner-Baltic argument supporting the immobility of *ie/o*-presents in Balto-

Slavic. It follows that the preponderant broken tone of Latvian *ia*-presents to acute roots and the mobility of Lithuanian *ia*-presents to light roots rest on (independent?) innovations. The widespread presence of non-acute variants to acute roots (*sprĕsti*, *-ia*, *-ĕ* ~ *sprĕ̃sti*, *-ia*, *-ĕ̃*) also finds a natural explanation if the stress usually stood on the root, as loss of *\*-ə-* in *\*-iā̃ > \*-aīā̃ > \*-iā̃ (> \*-ĕ̃)* gave rise to both compensatory lengthening and circumflex metatony.<sup>18</sup>

8. The results of the preceding section still tell us nothing about the accent curves of mobile preterits. Luckily, Slavic *je*-presents were not *exclusively* immobile. The same almost certainly holds true for Balto-Slavic. In Slavic *all je*-presents to roots ending in an obstruent are immobile and *all* of them have a second stem in *-a-* going back to the Balto-Slavic *ā*-aorist (e.g. *\*česāti*, *\*češq̇* AP *b* ‘comb’, *\*rĕzati*, *\*rĕžq̇* AP *a* ‘cut’, *\*lbzāti*, *\*ližq̇* AP *b* ‘lick’, etc.). Roots ending in a resonant, a glide, or a long vowel, on the other hand, include both mobiles and immobiles and verbs with and without second stem in *-a-* (e.g. *\*pōrti*, *\*porjḡ* AP *b* ‘unstitch’ vs. *\*orāti*, *\*ōrjḡ* AP *c* ‘plough’; *\*šīti*, *\*šījḡ* AP *a* ‘sew’ vs. *\*žvōāti*, *\*žījḡ* AP *c* ‘chew’; *\*lājati*, *\*lājḡ* AP *a* ‘bark’ vs. *\*blĕjāti*, *\*blĕjḡ* AP *c* ‘bleat’). Mobility and the absence of a second stem in *-a-* do not necessarily correlate with each other. Both features are less common than immobility and the presence of a second stem in *-a-*, but are not very rare either.

The picture of the Slavic *je*-presents has two implications for Baltic: a) most *ia*-presents were immobile and had an inherited *ā*-aorist. As just noted (§8), this is now fully confirmed by Baltic; b) Baltic inherited some mobile *ia*-presents as well (and some verbs without an inherited *ā*-aorist, though this cannot be seen in Baltic). The question now is whether any trace of mobile *ia*-presents survived into historical times. Since the preterit is the main reason to assume that Baltic *ia*-presents were normally immobile, irregular preterits may provide evidence for inherited mobility. Three patterns come into consideration:

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<sup>18</sup> As noted in §3, the *ē*-preterit was also original in the type *sakýti*, *sāko*, *sākē* and, more generally, in formations continuing a Balto-Slavic *ī*-present (PIE *\*-eje/o-*, cf. Viljanueva Svensson 2023b, 47–51). These display neither compensatory lengthening nor circumflex metatony. It must remain a task for the future to see whether this is due to analogy, to the fact that inherited *ī*-verbs were often mobile, or to still some other cause.

1. Bl.  $\bar{a}$ -preterits beside *ia*-presents, e.g. Lith. *lėisti, lėidžia, lėido* ‘let’;
2. Bl.  $\bar{e}$ -preterits beside *ia*-presents, but without the expected lengthened grade, e.g. *tar̃ti, t̃aria, t̃arė* ‘pronounce’;
3. Bl.  $\bar{e}$ -preterits beside other present stems, e.g. *gim̃ti, gimsta, gimė* ‘be born’.

The standard explanation for the first pattern is that the *ia*-present replaced another present stem (normally an *a*-present) at a recent date (cf. Lith. *grústi, -džia, -do* [dial. *-dė*] ‘crush’, where pres. *grúda* is attested in the dialects). Unexpected lack of lengthened grade is even rarer and has different causes. Thus, *tar̃ti, t̃aria, t̃arė* has replaced a paradigm *tarýti, t̃aria, t̃arė*, still preserved in Old Lithuanian. Lith. *káuti, káuja, kóvė*, Latv. *kaūt, kaūju, k̃avu* have a dialectal preterit Lith. *k̃avo*, Latv. *kavu* that clearly points to an inherited *a*-present, cf. Sl. *\*kováti, \*kòvq* AP *c* ‘forge’. An even clearer case is Lith. *šáuti, šáuja, šóvė* (dial. *š̃avo, š̃avė*) ‘shoot; shove’, though the *a*-present is unsupported by comparative evidence (Latv. *šāūt, šāuju, š̃avu*, without variants, Sl. *\*sováti, \*sovájq* ‘shove’). Lith. *gáuti, gáuņa (gáuja), g̃avo (góvė)*, Latv. *gaut, gauju/-nu, gavu (g̃avu)* ‘get’, finally, inherited a nasal present, cf. OPr. inf. *-gaūt*, pres. *-gaunai*, 1 pl. *-gaunimai*.

Cases like these are important for a variety of reasons, but do not provide information on the  $\bar{e}$ -preterit as such. There is, however, one verb that certainly does. PIE *\*h<sub>2</sub>arh<sub>3</sub>-je/o-* ‘plough’ is one of the best established Indo-European *je/o*-presents altogether (Gk. ἀρόω, Lat. *arō, -āre*, Gmc. *\*arjanan*, Celt. *\*arje-*; LIV, 272). It is clearly continued as such in Balto-Slavic (Lith. *árti, āria, ārė*, Sl. *\*oráti, \*òrjq* AP *c* ‘plough’). This verb is mobile in Slavic. Since mobility is exceptional in the Slavic *je*-presents, it must be inherited from Balto-Slavic. Since *je*-presents without second stem in *-a-* are well attested in roots ending in a resonant, the second stem *-a-* of Sl. *\*oráti, \*òrjq* must be inherited as well (i.e., it continues a Balto-Slavic  $\bar{a}$ -aorist). Thus, Slavic allows us to reconstruct a paradigm Bl.-Sl. inf. *\*ar-tī*, pres. 1 sg. *\*ar-īō*, 3 sg. *\*ar-īe-ti*, aor. 3 sg. *\*ar-ā* (see below for the accentuation).

What makes this verb so remarkable is that it is also irregular in Baltic. Lith. *árti, āria, ārė* has an  $\bar{e}$ -preterit, but without the expected lengthened grade. This is fully exceptional for roots ending in a resonant (the other case, Lith. *tar̃ti, t̃aria, t̃arė*, has been explained above). The regularization *órė* is attested in the dialects, but the far more widespread *ārė* is *lectio difficilior*. There are no recorded variants with the  $\bar{a}$ -preterit. The pristine picture of

Lithuanian is complicated by Latv. *ařt*, *ařu*, *aru*, without lengthened grade, but with an  $\bar{a}$ -preterit even in dialects in which the  $\bar{e}$ -preterit is well preserved. To put it in Lithuanian-like terms, Latvian appears to have chosen a curious regularization strategy  $\bar{a}\bar{r}\bar{e} \rightarrow *a\bar{r}o$ . The motivation lies in the development of inherited *o*-grade primary presents ('*molō*-presents') in Latvian.<sup>19</sup> Inherited *molō*-presents normally have *a*-presents in Baltic, cf. Lith. *mālti*, *māla*, *mālė* 'grind', *kālti*, *kāla*, *kālė* 'forge', *bārti*, *bāra*, *bārė* 'scold', *kāsti*, *kāsa*, *kāsė* 'dig'. The  $\bar{e}$ -preterit of *mālė*, *kālė*, *bārė*, *kāsė* is an innovation.<sup>20</sup> The original  $\bar{a}$ -preterit *mālo*, *kālo*, *bāro*, *kāso* is well attested in Lithuanian dialects and is the only one known in Latvian. In Latvian the presents *\*mala*, *\*kala* etc. have been regularly replaced by *ia*-presents *\*maļja*, *\*kaļja* etc.: *mālt*, *maļu*, *malu* 'grind', *kaļt*, *kaļu*, *kalu* 'forge', *bārt*, *baŗu*, *baru*/*bāru* 'scold', *kast*, *kasu*/*kaŗu*, *kasu* 'dig'. They kept their non-lengthened grade  $\bar{a}$ -preterit, though, which doubtless led speakers to extract the rule that *ia*-presents with root vocalism *-a-* have an  $\bar{a}$ -preterit without lengthened grade. Note that even the inherited *ia*-present *kārt*, *kaŗu*, *kāru* 'hang (tr.)' (Lith. *kārti*, *kāria*, *kórė* 'id.', without variants) acquired a preterit variant *\*karu* (cf. ME 2, 200). In short, the Baltic preterit of the verb 'to plough' was clearly *\*arĕ*, not the expected *\*āre*.

It is time to join the mobility of Slavic with the irregular preterit of Baltic. It is obvious that the early Baltic preterit was not *\*arijā* (this verb was not immobile) or *\*arijā* (with an *enclinenomen* that would probably have been treated like *\*arijā*, as Baltic otherwise never distinguishes between forms with initial lexical stress and *enclinenomena* as far as segmental phonology is concerned). It cannot have been *\*arijā* either, as the stress would have been retracted in *\*arijā* > *\*arjā*. The result of all these forms would have been *\*āre*, which would certainly not have been altered to the irregular *\*arĕ* (or *\*arē*). The inescapable conclusion is that the stress was on the preterit suffix *\*-ā*: *\*arijā*, whence by regular sound change *\*arjā* > *\*arjā* > *\*ariĕ* > *\*arĕ*. The simplest account of the final stress of *\*arijā* is that it simply kept the stress of the inherited  $\bar{a}$ -aorist: Bl.(-Sl.) *\*arā* >> *\*arijā*. This in turn implies that the Balto-Slavic  $\bar{a}$ -aorist to mobile verbs was stressed on the *\*-ā* in the 3<sup>rd</sup> singular.

<sup>19</sup> The PIE background of these verbs cannot be discussed here; see Jasanoff (2003, 64–90). Their development in Balto-Slavic is studied in Villanueva Svensson (2011b).

<sup>20</sup> As is the *communis opinio*, e.g. Stang (1966a, 380); Schmid (1967, 119).

9. Being irregular in both Baltic and Slavic, the verb ‘to plough’ is an almost ideal witness of prehistoric morphology (and accentology). Needless to say, it would be desirable to have some more evidence supporting the conclusion that Lith. pret. *āre* continues Bl. *\*arē̄* < *\*arājā̄* < *\*arijā̄* << Bl.-Sl. *\*arā̄*. I am aware of two pieces of evidence, both slightly problematic.

There is, first, the Old Prussian evidence quoted above §4. The *ē*-preterits OPr. *weddē* and *pertraūki* are certainly compatible with the results obtained in §§7–8. The *ē*-preterit of Lith. *vèsti, vēda, vėdė* ‘lead’ is an innovation, but an innovation going back to Proto-Baltic.<sup>21</sup> Since simple thematic presents like *vēda* were mobile (cf. Sl. *\*vesti, \*vědō* AP *c*) one expects the preterit to be mobile as well: OPr. *weddē* = Bl *\*arē̄*. OPr. *pertraūki* ‘pulled’, on the other hand, is in accordance with the immobile character of the vast majority of Baltic *ia*-presents. The same holds true for Ench. *kūra* ‘created’ and *līm(a)u-ts* ‘broke’, though their *ā*-preterit must be innovative (or, conceivably, an artificial product of Abel Will’s idiolect). This is obviously the case of Ench. *imma* ‘took’ vs. I/II *ymmi, ymmei*. If this stands for /imě/, as seems likely, its immobility is in accordance with Sl. *\*jěti, \*jěmō* AP *b* ‘take’ (even though the root vowel of the preterit is innovative vis-à-vis Lith. *ėmė*). I doubt much can be inferred from I/II *prowela* ‘betrayed’, as is generally the case of material from the first two Catechisms. Finally, *ismigē* ‘fell asleep’ appears to be an unquestionable mistake (Lith. *užmigo*), but see immediately below for the possibility that we are dealing with a genuine form.

Overall, Old Prussian confirms the views defended in this article reasonably well. As noted above (§4), however, the evidence of this language is surrounded with too many uncertainties to be fully trusted. We move to the second piece of evidence.

A number of Baltic *ē*-preterits do not stand beside *ia*-presents and do not look secondary either (unlike Lith. *vėdė* ‘led’, *mālė* ‘ground’, *gynė* ‘defended’, *mùšė* ‘beat’ and other innovated *ē*-preterits to *a*-presents). Significantly, almost all are intransitive and belong to the realm of nasal and *sta*-presents (which regularly have the *ā*-preterit): Lith. *dilti, dyla, dilo* (dial. *dĩlti, dėla, dilė*) ‘wear out; vanish’; *giñti, gįmsta* (OLith. *gēma*), *gimė* ‘be born’; *gulti, gùla, gùlė* ‘lie down’; *miñti, mėna, mìnė* ‘remember, recall’; *miřti, miřšta, miřė* ‘die’; *pulti, pùola, pùolė* ‘fall’; *skàsti, skañta, skàto* (dial. *skātė*) ‘spring, hop’; *svilti, svyla, svilo* (dial. *svĩlti, svėla, svilė*) ‘scorch’, *tapti, tañpa, tãpo* (dial. *tãpė*) ‘become’;

<sup>21</sup> Cf. Villanueva Svensson (2005, 243f.).

*vīrti, vērda, vīrē* ‘boil (tr./intr.)’; Latv. *nākt, nāku, nācu* ‘come’ (Lith. *nókti, -sta, -o* ‘ripen’).

In Villanueva Svensson (2005, 248–251; 2011a, 46–55) I have argued that (most of) these verbs had *ia*-presents at an early stage of Proto-Baltic, in their turn inherited from a Balto-Slavic class of inchoative *je/a*-presents best preserved in Slavic (cf. Tedesco 1948). The *ē*-preterit would then be regular (Bl. *\*gimijā* > *\*gimē* > Lith. *gimė*). It is curious that none of them has a lengthened grade preterit, though. The only verb in the set with a cognate in Slavic is the verb ‘to die’: Lith *mīrti, mīršta, mīrė* = Sl. *\*mertī, \*mǝr(j)ǝ* AP *c* ‘die’. The present is *\*mǝre-* in most of Slavic, but there is relatively abundant evidence pointing to an original *je*-present *mǝrje-*, cf. Koch (1990, 443f.). Like Sl. *\*orāti, \*ǝrjǝ* ‘plough’, the verb ‘to die’ is mobile. If this is inherited (and not a side effect of its general transfer to the class of the *e*-presents), Lith. *mīrė* falls entirely into place: Bl.-Sl. *\*mer(-s)-* (Sl. aor. *\*merxb̄, \*mǝrtǝ*) >> Bl. *\*mer-ā* or *\*mir-ā* >> *\*mir-ijā* (on pres. *\*mir-je/a-*) > *\*mirājā* > *\*mirjā* > *\*mirē*.

Unfortunately, it is impossible to know whether this scenario works for the other verbs as well. The idea that a sizable number of inherited Balto-Slavic inchoative *je/a*-presents were mobile could be supported by OPr. *ismigē*, but I am not aware of supportive evidence from Slavic (where, on the other hand, inchoative *je*-presents were regularly transferred to the class of *nǝ*-inchoatives, which are regularly immobile). At present I certainly do not exclude other scenarios to account for the root vocalism of the type Lith. *mīrė, gimė* etc., including mere analogy (in the end, these verbs have not the slightest trace of *ia*-presents in Baltic other than the *ē*-preterit itself).

**10.** Reconstruction of prehistoric Balto-Slavic stress position is often hard-won and the formations discussed in this article provide an egregious example.<sup>22</sup> The accentuation of the Baltic *ā*-preterit cannot be reconstructed on the available evidence. In the case of the *ē*-preterit, however, the pattern that became productive in Baltic necessarily demands root stress in most *ia*-presents. This is fully in accordance with the accentological behavior of the Slavic *je*-presents. It follows that the widespread “mobility” of *ia*-presents in Lithuanian and Latvian is an innovation. The verb ‘to plough’ allows us to reconstruct end accentuation for (at least) the 3<sup>rd</sup> person of mobile *ē*-preterits: *\*arē*. This can only continue early Baltic *\*arijā*, which in turn implies that

<sup>22</sup> See Majer (2017) for another recent example.

the Balto-Slavic  $\bar{a}$ -aorist had 3<sup>rd</sup> sg.  $*ar\acute{a}$ , with stress on the aorist marker  $*-\bar{a}$ . This is probably supported OPr. *weddē* ‘led’ and Lith. *mìrė* ‘died’, though this is not absolutely certain.

If correct, this reconstruction raises some new questions. Here I will limit myself to highlight one of them. The final stress of Bl.-Sl. 3<sup>rd</sup> sg.  $*ar\acute{a}$ , if correctly reconstructed, contrasts with the accentuation of the 2<sup>nd</sup>/3<sup>rd</sup> sg. of the Slavic aorist, which is an *enclinenomenon* in mobile verbs:  $*v\grave{e}de$  ‘led’,  $*v\grave{e}l\check{c}e$  ‘draged’,  $*bl'ûde$  ‘watched’,  $*d\grave{e}rtv$  ‘tore’,  $*pl\hat{u}tv$  ‘swam’,  $*z\grave{v}\grave{d}a$  ‘waited’,  $*b\grave{v}ra$  ‘took’,  $*\hat{a}vi$  ‘showed’ etc. At present it is hard to say whether this is a real problem. Historically, the Slavic aorist is a combination of PIE aorist and imperfect forms, the latter being found, precisely, in the 2<sup>nd</sup>/3<sup>rd</sup> sg. ending. Thus, it is uncertain whether forms like  $*v\grave{e}de$  or  $*v\grave{e}l\check{c}e$  actually tell us anything about the Balto-Slavic aorist. If we assume they do, early Baltic could have generalized final accentuation from the other endings (cf. Sl. 1 sg.  $*v\grave{e}šb\grave{v}$ ,  $*velx\grave{v}$  etc.), though I find this curious (the Baltic preterit paradigms were evidently rebuilt on the 3<sup>rd</sup> person singular). Could it be the case that Bl.  $*ar\acute{e}$  (Bl.-Sl.  $*ar\acute{a}$ ) has preserved the only certain relic of the original stress of the Balto-Slavic 3<sup>rd</sup> sg. aorist? I feel reluctant to draw such an ambitious conclusion from just one irregular form, but at present I do not believe we can exclude such a possibility. It is clear, at any rate, that more work is needed on the accentuation of the Balto-Slavic aorist.

## BALTŲ KALBŲ BŪTOJO LAIKO (IR BALTŲ-SLAVŲ $\bar{a}$ -AORISTO) KIRČIAVIMAS

### *Santrauka*

Prabaltų  $-ē$ - preteritai šalia  $-ia-$  prezensų įprastai buvo kirčiuoti šaknyje, kaip lauktina iš baltų-slavų perspektyvos ir kaip dabar rodo naujas požiūris į baltų cirkumfleksinę metatoniją ir su ja susijusius reiškinius. Mobilieji  $-ē$ - preteritai buvo kirčiuoti galūnėje: bl.  $*ar\acute{e}$  (lie.  $\tilde{a}r\acute{e}$ ). Savo ruožtu bl.  $*ar\acute{e}$  kilo iš ankstyvojo bl.  $*arij\acute{a}$ , o tai rodo, kad baltų-slavų mobilieji  $-ā-$  aoristai buvo kirčiuoti aoristo priesagoje bent 3 a. vns. formoje: bl.-sl.  $*ar-\acute{ā}$ .

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