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SIEVERS-EDGERTON'S VARIANTS, STANG-LARSSON'S RULE, AND NARTEN IMPERFECTS IN BALTIC LONG-VOWEL PRETERITS¹

Abstract. There are two preterit-stem formations in Baltic: $*\bar{a}$ -preterit and $*\bar{e}$ -preterit. The *ē-preterit includes a category called "long-vowel preterit" that is characterized by the long root vowel. There are at least two hypotheses regarding their origin. First, it has been proposed that these long-vowel preterits may have originated from the imperfect form of Narten presents. Then, it has been suggested that long root vowels were introduced through Stang-Larsson's rule operating on a variant of the Baltic preterit suffix *-ìyā-, where a vowel was lengthened and received a circumflex tone in a sequence *-V- $iy\bar{a}$ - / *- \bar{V} - $iy\bar{a}$ - > *- \tilde{V} - $iy\bar{a}$ (> *- \tilde{V} - \bar{e}). The second hypothesis explains the tone variation of the verbs in the root structure ERK-, EUK-, and EK-(e.g., sprésti/sprésti, spréndžia/spreñdžia, spréndė/spreñdė 'to stretch' < *(s)prend-). However, this is valid only when the suffix is accented, although the environment for the disyllabic suffix $(-i)v\bar{a}$ -) must be unaccented according to Sievers-Edgerton's law. What follows is that the disyllabic suffix originated in the root-accented long-vowel preterits, while the verbs with tone variation probably accepted the disyllabic -ìyā-, so that Stang-Larsson's rule later operated on them. Interestingly, some of these have a historical relationship with Narten presents, according to a previous study. This article presents the different historical developments of at least two groups of verbs that form the long-vowel preterits through an examination of the accentuation of these verbs.

Keywords: Indo-European; Baltic; historical morphology; historical accentology; verb; long-vowel preterit; Sievers-Edgerton's law; Stang-Larsson's rule.

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1. Introduction

Baltic has a simple preterit category that appears in two stem formations:

- ā-preterit, e.g., 3 sg./pl. Lith. *pirko*, Latv. *pirka* '(he/she/they) bought', which goes back to Proto-Baltic (PB) form **pirkā*,
- ē-preterit, e.g., 3 sg./pl. Lith. mìrė, OLatv. mire '(he/she/they) died', which descends from PB *mirē.

In Latvian, the \bar{a} -preterit has been generalized and the \bar{e} -preterit is usually not found, except for those preserved in old texts. The attestation of the \bar{e} -stem in old texts is indicated with " (\bar{e}) ", as in "miru (\bar{e}) ".

The Baltic preterit system has been variously discussed. The root structure-based conditions of the distribution of the preterit stems have previously been discussed (Schmid 1966; 1967). There has also been discussion of its transitivity-based tendency (Endzelīns 1923, 567f., 667; Stang 1966, 377), according to which intransitive verbs form the \bar{a} -preterits, whereas transitive verbs form the \bar{e} -preterits. The tendency of the distribution of \bar{a} -and \bar{e} -preterits to correlate to morphological categories (such as nasal-infixed presents often taking \bar{a} -preterits) has also been discussed (cf. Stang 1966, 377). The manner in which the \bar{e} -preterit has emerged and the distribution of the two stem formations has developed has also been discussed previously, cf. Schmalstieg (1961), Barton (1980), Villanueva Svensson (2005), and Larsson (2010). This paper will focus particularly on an enigmatic category called "long-vowel preterit", of which the \bar{e} -preterits are part. The long-vowel preterit is characterized by long vowel roots:

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(1) a. gérė 'drank' (inf. gérti, pres. gēria)
b. kėlė 'lifted' (inf. kélti, pres. kēlia)
c. lė̃kė 'flew' (inf. lė̃kti, pres. lė̃kia)
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Furthermore, some of them show tone variation.

(2) a. circumflex variant: inf. berti, 3 sg./pl. pres. beria, 2 sg./pl. pret. bere vs. acute variant: inf. berti, beria, bere 'to scatter,' Latv. Circumflex: bert, beru, beru vs. bert, beru, beru b. glebti, glebia, glebe vs. glebti, glebia, glebe 'to embrace' There are at least two hypotheses regarding the origin of the long-vowel preterit in Baltic.² Weiss (1993, 178ff.) and Jasanoff (2012) suggest that they may originate from the imperfects of Narten presents, based on examples from various IE languages, e.g., Lat. $\bar{e}d\bar{i}$ 'have eaten (pf.)'; Goth. 3 sg. pf. °et 'ate'; Alb. mola 'milked'; and Skt. marsti 'wipes'; etc.

Villanueva Svensson (2005; 2014), on the other hand, assumes that the long vowel and the circumflex variation found in the ia-present verbs, including those which form long-vowel preterits, have been introduced through a phonological process called Stang-Larsson's rule. His hypothesis presumes that the preterit suffix *- \bar{e} developed from *- $iy\bar{a}$ - through a vowel contraction (cf. Schleicher 1856, 224f.; Larsson 2010, 71ff.). In the case where the suffix was originally accented (*V- $iy\bar{a}$ -), the accent was retracted to the preceding vowel, which received the length and the circumflex tone, according to Stang-Larsson's rule:

*
$$V$$
- $iy\bar{a}$ - / * \bar{V} - $iy\bar{a}$ - 3 > * \tilde{V} - $iy\bar{a}$ - (> \tilde{V} - \bar{e}),
e.g., * ber - $iy\bar{a}$ - > * $b\tilde{e}$ r- $iy\bar{a}$ > * $b\tilde{e}$ r- \bar{e} > Lith. $b\tilde{e}$ r \dot{e} .

It is noteworthy that Villanueva Svensson (2014, 242ff.) shows that some of the long-vowel preterits with tone variation have etymologies that are probably related to the Narten presents or Narten causative-iteratives, which may link these two completely different hypotheses.

(3) a. PIE * $t\acute{e}up$ -ti / * $t\acute{e}up$ -nti \rightarrow ... \rightarrow Lith. $\acute{c}i\acute{a}upti$ / $\acute{c}ia\~upti$, -ia, -e 'to compress one's lips' b. PIE * $d\acute{e}lb^h$ -ti / * $d\acute{e}lb^h$ -nti \rightarrow ... \rightarrow Lith. $d\acute{e}lbti$ / $d\~e\~lbti$, -ia, -e 'to cast down (one's eyes)'

There is also a "reduplication theory" advocated by Streitberg (1896), Kortlandt (1999), Schumacher (2005), and LIV² (e.g., *ēd < *h₁e-h₁d- 'have eaten, ate', 230–231) among others. The theory was harshly criticized in Jasanoff (2012, 128). It appears crucial to the current author that the long-vowel preterits are not particularly characteristic to the verbal roots with root-initial laryngeals. As Jasanoff (2012, 128) points out, "[n]o roots beginning with *h₁e- form long-vowel preterites in Albanian and Tocharian, yet" long-vowel preterits are attested in these languages, e.g., Alb. mb-lodhi 'gathered', TB pret. 3 sg. $ly\bar{a}ka$ 'saw (< *gathered)'~ Lat. $l\bar{e}g\bar{a}$ 'have picked up' (* $le\hat{g}$ -). Furthermore, some roots with the initial * h_2 -, * h_3 - or with other consonants are also included as part of long-vowel preterits (cf. Lat. $\bar{e}g\bar{a}$ ← * $h_2e\hat{g}$ - 'to drive', TA impf. 3 sg. mid. $p\bar{a}rat$ 'carried' < * $b^h\bar{e}r(a)to$). This may indicate that long-vowel preterits are not a phonological phenomenon but are instead induced by lexical and morphological features. Therefore, this paper's discussion focuses on the other hypotheses, namely Narten imperfects and inner Baltic development, as proposed by Villanueva Svenson (2014).

³ The subscript tilde ($_{\sim}$) denotes an acute nucleus in Balto-Slavic, following the notation in Olander (2015).

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c. PIE *(h_1)r\acute{e}p-ti / *(h_1)r\acute{e}p-nti \rightarrow ... \rightarrow Lith. r\~{e}pti / r\'{e}pti, -ia, -e 'to take, embrace' d. PIE *p\~{o}\^{k}-eye-\rightarrow ... \rightarrow Lith. p\'{u}o\~{s}ti / p\~{u}o\~{s}ti, -ia, -e, Latv. p\~{u}o\~{s}t / p\~{u}o\~{s}t, -\~{s}u 'to adorn, decorate', etc...
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e. PIE * $b^h\acute{e}r$ -ti / * $b^h\acute{e}r$ -nti \rightarrow ... \rightarrow Lith. $be\~{r}ti$ / $b\'{e}rti$, $b\~{e}re$ / $b\'{e}re$ / $b\'{e}re$ / $b\'{e}rt$, -(r)u 'scatter' (Jasanoff 2012, 133)

The consequence of this interesting observation by Villanueva Svensson (2014) does not seem to have been fully investigated. Keeping in mind that the preterit suffix *-iyā- is a Sievers-Edgerton's disyllabic variant of *-yā- (Barton 1980, 269), the data may provide us a more detailed picture of the prehistory of the \bar{e} -preterit. In this paper, I would like to explore how far the insights of the aforementioned studies will take us.

2. Sievers-Edgerton's disyllabic variant of the preterit suffix

It has been suggested that the suffix * $-\bar{e}$ - in the \bar{e} -preterit developed from * $-iy\bar{a}$ - (> * $-\bar{e}$ -), a development that can be seen in some feminine \bar{e} -stems (e.g., Lith. $s\acute{a}ul\dot{e}$ (1) 'the sun' < * $s\acute{a}ul$ - $iy\bar{a}$) 4 as introduced in the previous section. Larsson (2010, 71ff.) further points out that the suffix * $-iy\bar{a}$ - is most likely a variant of * $-y\bar{a}$ -, a combination of the stem-characteristic *y and the Baltic preterit marker * $-\bar{a}$ -, by drawing our attention to the fact that the uncontracted form of the suffix * $-y\bar{a}$ - always occurs after a vocalic root as in $st\acute{o}$ -jo 'stood'. Barton (1980, 269) indeed assumes that the preform of the \bar{e} -preterit suffix * $-iy\bar{a}$ - is a Sievers-Edgerton's disyllabic variant of * $-y\bar{a}$ - from a point of view of historical phonology. Sievers-Edgerton's disyllabic variant typically appears in an unaccented environment preceded by a heavy syllable (cf. Sievers 1878, 129; Collinge 1985, 159–174):

*-
$$i\bar{a}_{\text{[-acc.]}} \rightarrow$$
 *- $y\bar{a}$ - (after a light syll')
*- $iy\bar{a}$ - (after a heavy syll')

The environment for the disyllabic *-iyā- (unaccented, preceded by a heavy syllable) is found in the long-vowel preterit forms, e.g., * $g\acute{e}r$ - $y\ddot{a}$ - > * $g\acute{e}r$ - $iy\ddot{a}$ - (> $g\acute{e}r\acute{e}$). It can also be found in the alleged descendants of the Narten imperfects, e.g., * $b\acute{e}r$ - $y\ddot{a}$ - > * $b\acute{e}r$ - $iy\ddot{a}$ -. However, they seem to present an accentual problem. Stang-Larsson's rule was supposed to operate when

⁴ The Baltic \bar{e} -stem appears to reflect various prehistorical groups of nouns. Some can be equated with the Latin 5th declension (Lith. $\check{z}v\tilde{a}k\dot{e}$ 'torch' ~ Lat. $fac\bar{e}s$), or presumably with the old ih_2 -stems extended by eh_2 -stems (Lith. $v\hat{i}lk\dot{e}$ 'she-wolf', cf. Skt. $v\underline{r}k\hat{t}h$, Schrijver 1991, 370–371). In this discussion, the focus is on the \bar{e} -stems that are possibly of the latter case.

the suffix was accented: $*V-iy\bar{a}-/*\bar{V}-iy\bar{a}->*\tilde{V}-iy\bar{a}~(>*\tilde{V}-\bar{e});$ cf. there is no operation of Stang-Larsson's rule in a case like $*s\acute{a}ul-iy\bar{a}>$ Lith. $s\acute{a}ul\dot{e}$ (AP1) 'the Sun.' But the Baltic descendants of Narten imperfects were apparently accented on the suffix $(*b\bar{e}r-iy\bar{a}-)$, not on the root, as indicated by Villanueva Svensson's observation that a few long-vowel preterits that possibly go back to Narten imperfects have tone variation introduced through Stang-Larsson's rule (e.g., $*r\bar{e}p-iy\bar{a}->r\tilde{e}p\dot{e}$). This means that the Baltic descendants of Narten imperfects were not in the environment of Siever's Edgerton's disyllabic variant, and therefore, their disyllabic suffix $*-iy\bar{a}-$ must have been generalized from the $*g\acute{e}r-iy\bar{a}-$ type ($*b\bar{e}r-y\acute{a}-\to *b\bar{e}r-iy\bar{a}-$).

Consequently, it can be assumed that the disyllabic suffix *-iyā-, which originated in verbs like * $g\acute{e}r$ -iyā- (> $g\acute{e}r\acute{e}$), was generalized to preterits in the *-yā-stem, including the descendants of Narten imperfects, where Stang-Larsson's rule introduced the circumflex variant to their root syllables. In order to examine this hypothesis, we must investigate how the accentuation pattern of the \bar{e} -preterits developed through the Proto-Baltic period. In the following section, some synchronic observations of the accentuation pattern of the Baltic preterit forms will be reviewed based on previous work, which will then be followed by a section on the historical analysis of the data.

3. Accentuation of the \bar{e} -preterits in Baltic

In Modern Lithuanian, all verbs exhibit the immobile pattern in finite forms, except for the mobility caused by Saussure's Law (Stang 1966, 449ff.):

	vèsti 'to lead'				dúoti 'to give'		
_	vedù (Saussure's Law)	pl.	vẽdame ~ 1	1sg.	dúodu	pl.	dúodame
2	vedì (Saussure's Law)		vẽdate	2	dúodi		dúodate
3	vẽda		vẽda	3	dúoda		dúoda
	preterit of vèsti				preterit of ge		
1sg.	vedžiaũ (Saussure's Law)	pl.	vẽdėme	1sg.	gériau	pl.	gérėme
2	vedeĩ (Saussure's Law)		vẽdėte	2	gérei		gérete
3	vẽdė		vẽdė	3	gérė		gérė

Their old mobility can be observed in prefixed forms, in participial forms in old texts and dialects, and, for the preterit stem, in the *imas*-formation (verbal nouns). For example, previously mobile verbal forms relinquish their accent to the prefix, as in 3 sg. pres. *pàveda* 'charge(s), entrust(s)', pret. *pàvedė*, or to the suffix in the *imas*-formation, e.g., *vedìmas* 'leading.' In Latvian, the mobility (of the aorist-infinitive stem) from earlier times is reflected as tones:

the sustained tone (\tilde{V}) indicating the immobile pattern, and the broken tone (\hat{V}) the mobile pattern.

With respect to the Slavic verbal forms of preterit value, there is no category comparable to the Baltic \bar{e} -preterit. Therefore, it is difficult to compare the mobility pattern of the Baltic preterits with any Slavic data. In Slavic in general, the mobility / immobility of the present stem affected that of other categories, such as the aorist stem, e.g., PS pres. 1 sg. *vedq; 3 sg. *vedetb* (APc: mobile); inf. *vesti; aor. 1 sg. *vesb* (APc). Therefore, in the following discussion, the primary focus is on Baltic data, while Slavic data are occasionally referred to for supplementary purposes. The Baltic forms diagnostic for the original mobile pattern generally indicate that the \bar{e} -preterits had the mobile pattern, with the exception of the preterits of causative-iterative verbs: e.g., OPru. wedde* 'led'; OLith. pâberei 'you (sg.) spilled'; atádawe 'gave back'; ModLith. nèvede* 'didn't lead'; OLith. pastact. ptpl. m. pl. nom. perdavé* 'having sold' (Daukša); ModLith. bėrìmas (2) 'pouring' (\leftarrow bėrė); etc.

However, some data, especially in Daukša's Postilė and Kurschat's dictionary, indicate that in older times, \bar{e} -preterits could also exhibit the immobile pattern, e.g., $d\tilde{a}vimas$ 'giving, distribution' (ModLith. davìmas (AP2)), $sl\tilde{e}pimas$ 'concealment' (ModLith. $sl\dot{e}pimas$ (AP2), Skardžius 1935, 68). This situation indicates that there used to be both immobile and mobile \bar{e} -preterits; however, they shifted to the mobile pattern in general. In fact, when we look into these diagnostic forms of the long-vowel preterits that have/do not have tone variations, an interesting tendency in the distribution can be found. In the next section, a pilot survey of these forms of long-vowel preterits will be presented.

4. Survey: Prehistory of long-vowel preterits with / without tone variation

This section presents a pilot survey on the accentuation pattern of the long-vowel preterit. First there is an examination of the accentuation of the long-vowel preterits with tone variations that have etymological connections with Narten present / Narten causative-iteratives (cf. Villanueva Svensson 2014; Jasanoff 2012). The data are taken from Kurschat (1883), Skardžius (1935) and LKŽe:

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• bérti / ber̃ti, -ia, bérė / ber̃e 'to scatter' prefixed form: apibėrė (mobile); imas-formation: bėrìmas (mobile) Latv. ber̃t (immobile) / bèrt
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[•] *čiáupti / čiaūpti, -ia, -ė* 'to compress one's lips' *àpčiaupė* (mobile), *čiaupìmas* (mobile)

- *délbti / delbti, -ia, -ė* 'to cast down (one's eyes)' *nùdelbė* (mobile), *delbìmas* (mobile)
- *répti / rěpti, -ia, -ė* 'to take, embrace' àprėpė (mobile), *rėpìmas* (mobile)
- grébti / grébti, -ia, -ė 'to rake' àpgrėbė (mobile), grėbimas (mobile), grébimas (1: immobile) Latv. grébt (mobile), PS *grábiti (APa: immobile)

Such examples remarkably often point to the mobile paradigm. Yet, there are some cases where another rule is relevant as well. For example, *kláusti* 'to ask' is historically an immobile verb, as shown in the prefixed form 3 p. pres. *apkláusia*, pret. *apkláusė*, and Sl. *slýšati 'to hear' (APa), *slúšati 'to listen' (APa). Apparently, its substantive form *kláusimas* (1) 'question' conforms to the historical immobile pattern, while its verbal noun form *klausìmas* (2) points to a mobile pattern. However, a semantic distribution of the accent of the *imas*-formation has been recognized (Skardžius 1935, 72). *Imas*-nouns with concrete meaning receive the barytone accentuation (*kláusimas* 'question', *róvymas* 'flax puller'), while *imas*-formations as verbal abstracts (*klausìmas* 'asking', *rovìmas* 'pulling up') receive the accent on the suffix in Aukštaitian dialects. The contrast of the different accentuations in the *imas*-formation needs to be comprehended from a semantic point of view as well.

Turning to the \bar{e} -preterits with invariant acute tone, they are more often found with the immobile pattern in Kurschat (and sometimes in Daukša, too):

• gérti, gérë 'to drink' įgérë 'took some drink' (immobile); gérimas 'beverage' (immobile in Daukša and Kurschat, beside mobile gérìmo 52_{49} 'beverage' in Daukša; mobile Latv. dzert, dzert, dzert (\bar{e})⁵)

⁵ The mobility may indicate the vacuous operation of Hirt's Law in the Proto-Balto-Slavic preform of the infinitive stem (i.e., *gerH-téi-), cf. Villanueva Svensson (2011, 302, fn. 4).

- gìrti, gýrė 'to praise' $ig\acute{y}r\acute{e}$ 'foisted' (immobile); gýrimas (immobile in Kurschat, beside mobile pattern, immobile Latv. $dzi\~rti\~es$, $dz\~i\~rti\~es$, $dz\~i\'rti\~es$, $dz\~i\'rti\'es$, $dz\~i\'rti\'es$
- *skìlti*, *skýlė* 'to split' *įskýlė* 'made fire/light by striking' (immobile); *skýlimas* (immobile in Kurschat; beside mobile pattern, immobile Latv. *skilt*)
- *pùlti, púolė* 'to fall' *atpúolė* 'relapsed' (immobile); *púolimas* (immobile in Kurschat; beside mobile pattern)

Absence of circumflex variants for these verbs indicates a vacuous operation of Stang-Larsson's rule on their ancestral forms, implying that the accent was on the root, i.e., immobile. This can be supported by the immobile pattern of these \bar{e} -preterits found in Kurschat. Their mobility that is found in the modern language could have been recently introduced, possibly through their paired ye/o-presents that exhibit the mobile paradigm.

This leads to another insight: If the accent was originally on the root in their ancestral forms, their long root could not have been introduced through Stang-Larsson's rule, but must have originally been long. One might then wonder where the length came from. The answer to this question would simply be the long root-aorist stem, e.g., root-aor. * $g\bar{e}r$ - (cf. OCS aor. 2/3 sg. $po\check{z}r\check{e}tb$) \rightarrow * $g\check{e}r$ - $iy\bar{a}$ - > pret. $g\acute{e}r\dot{e}$ ($g\acute{e}rti$ 'to drink'). The root vowel was shortened in the infinitive * $g\acute{e}r$ - $t\bar{e}i$ > $g\acute{e}rti$ through Osthoff's shortening, while the long root vowel was preserved in the preterit stem * $g\acute{e}r$ - $iy\bar{a}$. If this is indeed the case, the long-vowel preterits without tone variation have an origin completely different from Narten imperfects.

5. Working Hypothesis

This pilot survey showed that the presence or absence of the tone variation of long-vowel preterits possibly conforms to the original root accentuation or suffix accentuation of their ancestral forms. Furthermore, the former group, i.e., the long-vowel preterits with tone variations, has a close historical relation with the descendants of the Narten presents in Indo-European. On the other hand, the second group, which does not exhibit tone variation except for only the invariable acute tone, can be considered to have inherited the agrist stem.

This may indicate that the long-vowel preterits comprise different groups of verbs with different origins. The long-vowel preterits with invariable acute tone would have maintained the accent on the root throughout Proto-Balto-Slavic and Proto-Baltic times, producing the disyllabic variant of the preterit

suffix *-yā- e.g., * $g\tilde{e}r$ -yā- \rightarrow * $g\tilde{e}r$ -iyā-. It has been observed that they mostly indicate the older immobile pattern. In fact, their aorist-infinitive stems can explain their long acute root, if it is assumed that they are based on the aorist-infinitive stems extended by the Baltic preterit marker *-(y)ā-.

- PIE * $g^w erh_3$ > late PBS aor-inf. * $g\bar{e}r$ \rightarrow PB * $g\bar{e}r$ - $iy\bar{a}$ > Lith. $g\dot{e}r\dot{e}$ 'drank'
- PIE * $g^w er H$ > late PBS aor-inf. * $g\bar{t}r$ \to PB * $g\bar{t}r$ - $iy\bar{a} \to$ Lith. $g\acute{y}r\dot{e}$ 'praised'
- PIE *skelH- > late PBS aor-inf. *sk $\bar{e}l$ \rightarrow PB *sk $\bar{e}l$ -iy \bar{a} > Lith. sk $\acute{e}l\dot{e}$ 'split'
- (etymology unknown) PB aor-inf. * $\bar{\varrho}rg-\to *\bar{\varrho}rg-iy\bar{a}>$ Lith. $\acute{e}rg\dot{e}$, Latv. $e\hat{r}dzu$ 'peeled,' etc.

However, it remains to be explained why the variant form $*-(i)y\bar{a}-$ with a hiatus breaker, and not $*-\bar{a}-$, was chosen. It might be due to transitivity (cf. Barton 1980, 252; Villanueva Svensson 2005) or have a completely different origin (cf. Seržant 2008, 315). This awaits a more fundamental study on the origin of the Baltic preterit marker.

On the other hand, the long-vowel preterits with tone variation have had a different morphological and phonological history. If it is maintained that the Narten imperfects are related to their ancestors, they were probably originally accented on the root. But it has been suggested that, at least in Baltic, they were accented on the suffix or mobile. Later, they accepted the disyllabic variant of the suffix *-yā- from the *gér-iyā-type, e.g., (*póś-t \rightarrow) *pōś-yá- \rightarrow *pōś-iyā-. Finally, the operation of Stang-Larsson's rule introduced the circumflex tone variation: *pōś-iyā- \rightarrow *pōś-iyā [Stang-Larsson's rule] \rightarrow *pōś-ē \rightarrow Lith. puōšė beside púošė 'decorated.'

It is noteworthy that the accent may not have always been on the suffix, but on the ending in the personal forms of plurals, e.g., *pōś-iyā-mé, *pōś-iyā-té, where the disyllaboc variant of the suffix could be expected phonologically. As Skardžius (1935, 202) notes, there are inflectional forms that suggest ending accentuation of the preterit paradigm in Daukša's Postilė. Some are

The immobility / mobility of these long-vowel preterits may be related to the distinction of *set*- and *anit*-roots. As shown in Villanueva Svensson (2011), the operation of Hirt's Law in the infinitive forms in Proto-Balto-Slavic are reflected as immobile accent (i.e., Latvian even tone) in the Baltic infinitives. The same might be applied to some preterit forms. Many long-vowel preterits with invariable acute tone go back to *set*-roots, if their roots can be reconstructed for PIE, and relatively often exhibit immobile accent pattern. On the other hand, the alleged descendants of Narten imperfects mostly reflect *anit* roots and they appear to have developed the mobile accent pattern.

from the \bar{a} -preterit, e.g., pażinomé 'we knew,' pażinoté 'you (pl.) knew,' while there are also \bar{e} -preterit forms that suggest the ending accentuation, e.g., padâretê 'you (pl.) did', ⁷ pridegeté 'you (pl.) covered, veneered'. If these forms are taken seriously as the indication of older accentuation on endings, we may understand better the background of the tone variations. The accent on the suffix could be retracted to the root vowel as a result of Stang-Larsson's rule at least in the 3rd person form, where the suffix stood in the wordfinal position $(*\bar{V}-iy\bar{a}>*\tilde{V}-\bar{e}>$ Lith. $\tilde{V}-\dot{e})$, while the retraction of accent and Stang-Larsson's rule may not have occurred in plural forms (1 pl. * \bar{V} - $iy\bar{a}$ - $m\bar{e}$, 2 pl. * \bar{V} - $iy\bar{a}$ - $t\bar{e}$). Thus, the acute variants still remained in the plural forms side by side with the 3rd person forms that introduced the circumflex tone. This situation may explain the current coexistence of acute and circumflex tone variations of these long-vowel preterits. As mentioned above, there are still problems to be solved regarding the prehistory of the Baltic preterit marker; however, this paper has at least showed that long-vowel preterits, which have been regarded as one category, may in fact be composed of at least two different origins. Needless to say, this issue requires further investigation.

SIEVERSO-EDGERTONO VARIANTAI, STANGO-LARSSON DĖSNIS IR NARTEN IMPERFEKTAI BALTŲ KALBŲ ILGOJO BALSIO PRETERITUOSE

Santrauka⁸

Baltų kalbose egzistuoja du būtojo kartinio laiko (preterito) kamienų tipai: ${}^*\bar{a}$ -preteritai ir ${}^*\bar{e}$ -preteritai. ${}^*\bar{E}$ -preteritai apima kategoriją, vadinamą ilgojo balsio preteritais, kurių šaknims būtajame kartiniame laike būdingas pailgintas vokalizmas. Be to, kai kurių ilgojo balsio preteritų priegaidės varijuoja, plg. lie. $be\bar{r}ti$, 3 sg./pl. pres. $b\bar{e}ria$, 2 sg./pl. pret. $b\bar{e}r\dot{e}$ vs. inf. $b\acute{e}rti$, $b\acute{e}r\dot{e}$. Apie ilgojo balsio preteritų kilmę iškeltos bent dvi hipotezės. Weissas ir Jasanoffas teigė, kad ilgojo balsio preteritai, egzistuojantys ne tik baltų, bet ir kitose indoeuropiečių kalbose, gali būti kilę iš Narten tipo esamojo

⁷ For the double accentuation in Daukša's works in general, Young (2000, 19) argued that it may represent a transition of old and innovative accentuations, mainly based on nominal data. Although a sequel study on verbs has, unfortunately, yet to be done, if the same principle applies to the verbal forms, which is not altogether unlikely, this form $(pad\hat{a}ret\hat{e})$ could represent an old accentuation on the ending.

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