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LITH. *MIR̃TI* / LATV. *MIRT* 'TO DIE' AND LITH. *MIR̃ŠTI* / LATV. *MÌRST* 'TO FORGET' IN EAST BALTIC[1]

Liet. *mir̃ti* / latv. *mirt* 'mirti' ir liet. *mir̃šti* / latv. *mìrst* 'pamiršti' rytų baltų kalbose

ANNOTATION

The verbs Lith. *mir̃ti* / Latv. *mirt* 'to die' and Lith. (–)*mir̃šti* / Latv. (–)*mìrst* 'to forget' share several features in historical morphology: both take *sta*-present stem, in spite of their Indo-European cognates in the **-ye/o-* present stem; the root-aorist in the middle voice inflection can be reconstructed in PIE; and both are also semantically middle. However, they are contrastive in the past tense in Baltic, taking different preterit stems, i.e., Lith. *mìrė* / Latv. *miru(ē)* and Lith. *mir̃šo* / Latv. *mìrsu(ā)*. This article will investigate what led them to choose the different preterit stems by comparing their semantic and phonological properties, and will contribute to the reconstruction of the entire prehistory of the Baltic preterit system. In this article, it will be proposed that Lith. *mìrė* / Latv. *miru(ē)* is probably descended from the older imperfect, while its aoristic nature led Lith. *mir̃šo* / Latv. *mìrsu(ā)* to inherit the older aorist stem, and this historical difference may be reflected in their different preterit stems.

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ANOTACIJA

Du veiksmažodžiai – liet. *mir̃ti* / latv. *mirt* 'mirti' ir liet. (-)*mir̃šti* / latv. (-)*mìrst* 'pamiršti' – turi keletą bendrų istorinės morfologijos ypatybių: abu šie veiksmažodžiai turi esamojo laiko *sta*- kamieną, nepaisant giminiškų indoeuropietiškų esamojo laiko **-ye/o-* kamienų formų; iš indoeuropiečių prokalbės galima rekonstruoti, kad šių veiksmažodžių šakniniai aoristai linksniuojami kaip medijai; abu šie veiksmažodžiai pasižymi medijų semantika. Vis dėlto palyginus baltų kalbas matyti, kad jų preteritų kamienai skiriasi: liet. *mìrė* / latv. *miru* (*ē*) ir liet. *mir̃šo* / latv. *mìrsu* (*ā*). Šiame straipsnyje lyginant semantines ir fonologines ypatybes tiriama, kodėl šie veiksmažodžiai įgijo skirtingus preterito kamienus, bei prisidedama prie visos protobaltų kalbos preterito sistemos rekonstrukcijos. Straipsnyje teigiama, kad liet. *mìrė* / latv. *miru* (*ē*) tikriausiai yra kilęs iš senojo imperfekto kamieno, o liet. *mir̃šo* / latv. *mìrsu* (*ā*) dėl aoristinių semantinių ypatybių galėtų būti kilęs iš senojo aoristo kamieno. Šis istorinis skirtumas atsispindi skirtinguose jų preterito kamienuose.

ESMINIAI ŽODŽIAI: baltų veiksmažodžiai, veikslas, *mir̃ti*, *mir̃šti*, *ā*-preterito kamienas, *ē*-preterito kamienas, baltų kalbų morfologinė istorija, aoristas, imperfektas.

§1. The morphological contrast of the two verbs, Lith. *mir̃ti* / Latv. *mirt* 'to die' and Lith. (-)*mir̃šti* / Latv. (-)*mìrst* 'to forget', in their preterit forms is the central topic of this paper. Except for their root structure (*CR̥*- for Lith. *mir̃ti* / Latv. *mirt* and *CR̥C*- for Lith. (-)*mir̃šti* / Latv. (-)*mìrst*), the two verbs share a number of historical and morphological features. To name a few, both form *sta*-presents in East Baltic, both have cognates in Indo-European languages with the present stem in **-ye/o-* and the root-aorist inflecting in the middle voice, and both are also semantically middle:

1) Lith. inf. *mir̃ti*, pres. *mìršta*, pret. *mìrė*; Latv. inf. *mirt*, pres. *mirstu*, pret. *miru*(*ē*) 'to die':
   OCS pres. 3sg. *umьŕetъ* (Zo), inf. *mrěti*, root-aor. 2/3sg. *mrě*(*tъ*); Sln. pres. 1sg. *mrjèm*;
   Skt. pres. 2sg. mid. *mriyáse*, pf. 3sg. *mamā́ra*, root-aor. mid. 3sg. *ámr̥ta* (LIV² 439);
   YAv. *mar*- 'to die', pres. 3sg. mid. *framiriieite*, 2sg. inj. mid. *auua.miriiaŋha*, OPers. *mar*- 'to die', impf. 3sg. mid. *am(a)riyatā*, Manichean MPers. *myr*-, Zoroastrian MPers. *myr*- /*mīr*- / 'to die', Partian *myr*- 'to die', Sogd. *myr*- (both in Christian and Buddhist texts) 'to die' (Cheung 2007: 264–265);
   Lat. *morior*; OHitt. (**root-aor. act. >) root-aor. mid. *merta* 'disappeared, went lost';
   from PIE **mer*- 'to die' (LIV² 439);

2) Lith. (-)*mir̃šti*, (-)*mìršta*, (-)*mir̃šo*; Latv. (-)*mìrst*, (-)*mìrstu*, (-)*mìrsu*(*ā*) 'to forget':
   Skt. pres. 3sg. mid. *mŕ̥ṣyate*, pf. *mamárṣa*, root-aor. mid. 3sg. *amr̥ṣṭa*, a-aor. mid. 3pl. *ámr̥ṣanta* 'to forget' (LIV² 440–441);

Lith. *mir̃ti* / Latv. *mirt* 'to die' and Lith. *mir̃šti* /
Latv. *mìrst* 'to forget' in East Baltic

Manichean MPers. *fr'mwš-*, Zoroastrian MPers. *pl'mwš-* / *frāmōš-* / 'to forget', pres. 3sg.
pl'mwšyt / *frāmōšēd* /, Partian *fr'mwš-* 'to forget', pres. 3sg. *fr'mwšyd*; Sogd. *fr''wyšcy*, *βr'wcy*,
MSogd. *fr'wycyh* 'forgetfulness' (Cheung 2007: 268–269);
TochB (III) *märsetär* 'to forget'; from PIE **mers-* (LIV² 440–441).

Consequently, a present stem in **-ye/o-* (3sg. **mr̥-yor* 'dies' 3sg. ** mr̥s-yor* 'forgets') and the root-aorist (3sg. **mr̥-to* 'died', 3sg. **mr̥s-to* 'forgot'; probably with a zero-grade root and dental endings) in the middle voice can be securely reconstructed for Proto-Indo-European for both. Furthermore, the pattern shared by these two verbs is associated with the "stative-intransitive system" (Jasanoff 2003: 155, 160), characterized by the attestations of passive aorist (or the ablauting middle root aorist) in non-passive use, stative perfect, and intransitive(-inchoative) *ye/o*-present (and also the Balto-Slavic *ĭ*-presents to *ē*-statives) in the Indo-European languages. The verbal roots associated with this system are supposed to denote entry into a state. Apparently, the archaic ablauting middle root aorist does not seem to have been inherited by these two verbs in East Baltic. Given these resemblances, they can be expected to have similar historical development from PIE to Baltic, still exhibiting the same morphological patterns in the Baltic languages. However, Lith. *mir̃ti* / Latv. *mirt* takes the *ē*-preterit, while Lith. *mir̃šti* / Latv. *mìrst* takes the *ā*-preterit. Of course, the presence of *métatonie rude* in *mìršta* 'die(s)' and the absence thereof in *mir̃šta* 'forget(s)' does not appear to be a trivial difference. This will be discussed in §7 below. If the *ia*-present stem is the source of the *ē*-preterit stem, as advocated by Barton (1980) and Villanueva Svensson (2005, 2006), there must have been a reason for PB **mir̃śya-* not introducing **-(i)yā-* to its preterit stem. This raises the question (at least to the present author) of what allowed them to create different preterit stem formations.

§2. Before moving forward in our discussion, some discussion of the prehistory of the Baltic preterit system and of previous research on the historical background of the Baltic *ā*-preterit and *ē*-preterit is required. Although various hypotheses have been presented to explain why these formations differ, not all of them can be presented here due to limitations of space. To begin, the Baltic languages have two preterit stems, as is well known: the *ā*-preterit and the *ē*-preterit. Any given verb in these languages takes one of these two stems in the past tense, which means that the two stems are in complementary distribution. There is only one exception to this rule – the preterit of *bū́ti* 'to be' in Old Lithuanian. While the preterit forms of Lith. *bū́ti* / Latv. *bût* 'to be' are *buvo* and *biju* in standard Lithuanian and Latvian, respectively, OLith. 3sg. pret. *biti* and OPru. *be* (beside *bēi*, *bei*) are attested as the preterit forms of the verb meaning

'to be'. These forms apparently had no stem-forming suffix like *-ā- or *-ē-. OPru. *be* can be equated with OCS *bě*, which is the imperfect of *byti* 'to be', but inflects like an aorist (cf. Stang 1942: 85). OPru. *be* can also be compared with something akin to the aorist of stative verbs of the type *sėdėjo* to *sėdėti*, *sėdi* 'to be sitting', presented in Stang (1966: 381), and its historical background does not seem straightforward.[2] But OLith. *biti* is probably based on an imperfect of *bhuh2-ye/o-* 'to become' (→ PBS *bh(w)ī-* > PB *bī*), combined with the athematic primary ending 3sg. *-ti* (Stang 1966: 380).[3][4] Latv. *biju* has the same imperfect-based stem, but is extended by the Baltic preterit stem *-ā-* and the hiatus breaker *-j-*, e.g., 1sg. *bī-jā-ō*. Thus, it can be observed that, later than the other verbs, the preterit of Lith. *búti* accepted the new Baltic preterit formation rule using the suffixes *-ā-* and *-ē-*, whereby the former imperfect stem was directly followed by the primary ending. This enables us to infer how the Baltic verbs might have been furnished with their preterit stems. Most likely, the preterit stems in Baltic were originally formed with an imperfector aorist-based stem followed by the (thematic or athematic) primary ending. The preterit suffixes *-ā-* and *-ē-* were later introduced to all the verbs due to additional factors, with at least one such factor immediately coming to mind. The imperfect forms without the augment of some verbs would have shared the same form with the present forms, if the imperfect-based preterit forms had started taking the primary endings in Proto-Baltic, as seen in OLith. *biti*, e.g., PBS pres. *Har[H]-ye-t(i)*, impf. *Har[H]-ye-t* (→ pres. / impf. *ar-ya-t(i)* > Lith. *ãria*, *ãrė* to *árti* 'to plow')[5]. It must have become necessary to distinguish

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[2] Klingenschmitt (1982: 3–5) suggests that OCS *bě* and OPru. *be* are a continuation of the augmented imperfect *(h1)e-h1es-*, with a secondary *b-* taken from associated forms, such as inf. *byti*, *būton*, etc.

[3] ModLith. *buvo* is a completely new formation based on the infinitive *búti* / perfect active participle *buv-* with the Baltic preterit suffix *-(v)ā-*.

[4] A different historical interpretation of the form is proposed by Ostrowski (2008: 463–464), according to which the final syllable *-ti* in *biti* is not a personal ending but would historically be an enclitic pronoun, e.g., *dŭsiŭ-t* (*duosiu tau*) 'I will give you' (BB Pat, 3,28). This would, however, leave a question, i.e., whether *biti* would be well-formed, since the predicted form *biti* would have neither a stem-forming vowel nor a personal ending. As rightly stated by Ostrowski (2008), the athematic primary ending was otherwise never attested in the Baltic preterit forms. However, since the thematic primary endings are used in preterit forms (e.g., 1sg. *-au* < *-ā-u*, 2sg. *-ai* < *-ā-i* for the ā-preterit; 1sg. *-iau* < *-ē-u*, 2sg. *-ei* < *-ē-i* for the ē-preterit, also see Barton 1980: 269), it is not unreasonable to assume that the athematic primary endings could have been also used in preterit forms. Therefore, in the discussion in this section, the classic view by Stang is maintained.

[5] The *i*-apocope would also have played a role in the process.

the present and preterit forms by the stem formations, which possibly required an introduction of the dedicated preterit suffixes.

§3. It seems to be a widely shared notion that the Baltic *ā*-preterit suffix more or less shares the same origin as the Slavic *ā*-aorist, or the second-stem aorist in *-a-* of the type 1sg. *bъraxъ*, 2/3sg. *bъra* 'to take' (Stang 1942: 189; Jasanoff 1983: 62), formed to the zero-grade root.[6] The problem with this idea is presented by the origin of the Baltic *ē*-preterit, which does not seem to have a direct comparandum even in its closest branch, Slavic. Stang's (1942: 83) assessment should probably be maintained on the point that the Slavic *ě*-imperfect does not coincide with the Baltic *ē*-preterit because the Slavic *ě*-imperfect does not particularly occur with transitive verbs (but its occurrence is instead phonologically conditioned), while the Baltic *ē*-preterit clearly occurs frequently with transitive verbs.[7] Different vocalisms in the root of the Slavic *ě*-imperfect and the Baltic *ē*-preterit should also not be ignored (Stang 1942: 84). Therefore, previous studies have left the historical origin of the *ē*-preterit a problem to be solved. It is true that the Baltic *ē*-preterit often occurs (e.g., *nešė* 'carried') where the *s*-aorist occurs in Slavic (1sg. *něšъ* 'carried'), and thus these two categories must have had something in common. Therefore, Schmalstieg (1961) envisaged the possibility that the *ē*-preterit developed from the Indo-European imperfect (2sg. *$h1nek̂e$-s*, 3sg. *$h1nek̂e$-t* 'to carry'), which occurs in the 2nd and 3rd person singular of the *s*-aorist paradigm in Slavic (2/3sg. *neše*).

On the other hand, there is a completely different approach that sees the suffix of the *ē*-preterit as developing through a sound change (*$iyā$ > *ē* (Kurschat 1876; Schleicher 1856: 224f.; Larsson 2010: 71ff.)). This can be supported by the fact that the *ē*-preterit is regular for the causative-iterative verbs in inf. *-yti*, pres. *-ā* (← PB *-iya- < PIE *eye/o-) of the type *mókyti*, std. *móko* / dial. *mókia*, *mókė* 'to teach', where the preterit stem *-ē*- can be assumed in all likelihood to have developed from the imperfect-based stem in *-iyā*- (cf. Pedersen 1926: 11). More recently, Barton (1980) and Villanueva Svensson (2005) elaborated on this hypothesis. Barton (1980) suggests that *-(i)y*- was introduced to the

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[6] Stang (id.) distinguished between two *ā*-preterit types: 1) descendants of the Balto-Slavic *ā*-aorist mentioned immediately above, and 2) descendants of the Balto-Slavic thematic aorist. As mentioned in Stang (id. 383), the thematic aorist was probably replaced by the *ā*-aorist. Therefore, it can be said that the *ā*-suffix of the *ā*-preterit is a morphological continuation of the Balto-Slavic *ā*-aorist.

[7] Pace Kortlandt (2005: 168) and Jasanoff (2017: 229, fn. 107), where the *ē*-preterit is associated with the stative verbs in *-ē*- (e.g., *tekéti* 'to flow', *gūžéti* 'to lie (under something warm)'), which is descended from the original instrumental ending *-eh1* according to Jasanoff (1978: 123–125).

preterit stem analogically from the present stem in *-ya- (< PIE *-ye/o-), particularly in the cases of some verbs, including *miršta* (← *miria(*t*)). The proposed analogical process could be formulated as such:

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\begin{array}{lll}
\text{early Proto-Baltic} & \text{pres. *}mir\text{-}ya\text{-} & : & \text{pret. *}mir\text{-}\bar{a}\text{-} \\
& & \downarrow & \\
\text{*}mir\text{-}ya\text{-} & : & \text{*}mir\text{-y}\bar{a}\text{-} \\
& & & \rightarrow \text{*}mir\text{-}\bar{e}\text{-}
\end{array}
$$

The -ē- suffix could have developed from *-(*i*)*yā*- through the paradigm leveling triggered by the 1st and 2nd person singular endings (1sg. *-*yāu* > -*iau*, 2sg. *-*yāi* > -*ei*), which would have resulted in the same forms as those of the ē-preterit (1sg. *-ēu > -*iau*, 2sg. *-ēi > -*ei* (Barton 1980: 269)). Villanueva Svensson (2005) takes a more radical position, proposing that originally Proto-Baltic had only the ā-preterit, and the ē-preterits basically developed from the *-*iyā*-stem, where the above-mentioned analogy introduced the *-(i)y- element to the original ā-preterit stem of the *ia*-presents.[8] This could certainly explain why the ē-preterit is regular for the *ia*-presents, as described in such grammars as Endzelīns (1923: 590) and Stang (1942: 191; 1966: 377). Applied to the case of *miřti* and *miřšti*, however, this hypothesis would predict that both of the verbs should take the ē-preterit, and would not explain why the preterit of *miřšti* remains an ā-preterit. It is true that that is exactly how analogy works, i.e., it does not affect linguistic forms regularly as a sound law does. In this particular case, however, perhaps a more sensible reason could be found for why these two verbs take different preterit stems in Baltic.

§4. At least two differences between the two verbs can be observed. One is a difference in valency. Although both have middle-voice semantics, whereby the subjects have little control over the events denoted by these verbs, Lith. *miřšti* / Latv. *mìrst* is a transitive verb, as it (underlyingly) takes an object, whereas Lith. *miřti* / Latv. *mirt* presumes no object. But this feature would have naturally led to Lith. *miřšti* / Latv. *mìrst* taking an ē-preterit rather than an ā-preterit, and thus did not contribute to the eventual outcome.

The second difference can be seen in their lexical aspects. While Lith. *miřti* / Latv. *mirt* has a dual aspectual character, i.e., it can be read as either imperfective or perfective depending on context (cf. Ambrazas 1997: 235), this does not

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[8] In the current author's view, it is possible that the ē-preterit has several different historical sources, cf. Schmalstieg (1961).

seem to be the case for Lith. *mir̃šti* / Latv. *mìrst*. Generally in Lithuanian, verbs without any prefixes are grammatically imperfective (cf. Dambriūnas et al. 1990: 385; Ambrazas 1997: 234–235), and Lith. *mir̃ti* / Latv. *mirt* is no exception to this rule, as shown in (3a, b). The Latvian example in (3d) may best demonstrate the usual contrast of unprefixed and prefixed verbs. However, as in (3c), the imperfective forms of Lith. *mir̃ti* / Latv. *mirt* in the preterit tense can convey perfective meaning in a specific context:

3) a. *Jis mìršta.* 'he dies / is dying' (Lithuanian, Ambrazas 1997: 235)
   'he' 'die' impf. 3pres.;

   b. *Žmónės mìrė kasdien.* 'People died every day.' (Lithuanian, id.)
   'people' pl. nom. 'die' impf. 3pret. 'every day';

   c. *Mergaitė mirė vakar.* 'the girl died yesterday' (Lithuanian, id.)
   'girl' sg. nom. 'die (pf.)' impf. 3pret. 'yesterday';

   d. *Dažu dienu mira un nenuomira.*
   'many' 'days' gen. pl. 'die' impf. 3pret   'and / but' 'die' pf. 3pret.
   '(he was) dying for many days, but he did not die.'
   (Latvian, Endzelins 1948: 241).

This is what is meant by the "dual aspectual" feature (Ambrazas 1997: 235) of Lith. *mir̃ti* / Latv. *mìrt.* Now, in the case of Lith. *mìršti* / Latv. *mìrst*, the contrast of unprefixed (imperfective) and prefixed (perfective) forms appears to be different.

4)[9] a. *Miršau dvejus metus, ką jis sakė.*
   'forget' **impf.** 1sg. 'two (coll.)' 'year' pl.acc. rel-pron. acc,
   'he' sg. nom. 'say' 3pret.
   'For two years, I was trying to forget what he said.'
   b. *Užmiršau per dvejus metus, ką jis sakė.*
   'forget' 1sg. pret. **pf**. 'during' 'two (coll.)' pl. acc.
   'year' pl.acc. rel-pron. acc. 'he' sg. nom. 'say' 3pret.
   'Within two years, I completely forgot what he said'.

   c. *Rùsiškai taĩ jaũ nemiršiù.* (Lithuanian, LKŽe)

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[9] I am indebted to my Lithuanian informant, MA Greta Klimaitė, for her language check on the data in (4) and the translations, and for her linguistic advice on the data. Needless to say, all remaining mistakes are mine.

'Russian' 'so' 'already' NEG– 'forget' **impf.** 1sg. fut.[10]
'I will definitely not forget Russian.'

    d. *Miršaũ miršaũ ir užmiršaũ visaĩ, ką̃ jìs sākė.* (Lithuanian, LKŽe)
      'forget' 1sg. pret. **impf.** 'and' 'forget' **pf.** 1sg. pret. 'all,
    completely' rel–pron. acc. 'he' sg. nom. 'say' 3pret.
    'I kept forgetting and completely forgot all that he said.'

    e. *Kárvė ver̃šį jaũ pràdeda apmir̃šti.* (Lithuanian, LKŽe)
    'cow' sg. nom. 'calf' sg. acc. 'already' 'start' 3pres.
    'forget partially' **pf**. inf.
    'The cow has started to forget its calf.'

    f. *Kárvė ver̃šį jaũ pràdeda užmiršinéti.*
    'cow' sg. nom. 'calf' sg. acc. 'already' 'start' 3pres.
    'forget little by little' **pf.** (iterative). inf.
    'The cow has started to forget its calf.'

Lith. *miršti* usually takes perfective (prefixed) forms,[11] and its imperfective (unprefixed) forms in the preterit could be associated with a peculiar situation like "active forgetting", where the event "forgetting" can take some time, and the subject can be conscious of the process, e.g., when trying to forget a traumatic or unpleasant memory, as in (4a). This indicates that *miršti* could take grammatical imperfective forms; however, they are seldom used. In the future tense, the imperfective forms seem to instead offer a perfective meaning, as in (4c). Needless to say, the perfective forms denote the perfective aspect, as in (4d), as is to be expected (cf. Dambriūnas 1958).[12] These facts strongly point to the perfective lexical aspect of the verb *miršti*. This may be supported by the following: the perfective infinitives can be used with *to begin* (*pradėti*, *imti*) and *to end* (*baigti*), as in (4e), but such constructions sound better with the perfective infinitive of iterative (lexically imperfectivized) verbs like *užmiršinéti*, as in 4f (cf. Dambriūnas 1958: 260).

The fact that the imperfective forms of Lith. *miršti* / Latv. *mirst* are rarely used may indicate, from a historical perspective, that it may be the case that the old aorists were reinforced in Baltic (and Slavic) languages by adding prefixes, if the proposal by Ostrowski (2019: 57) is to be accepted in our current

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[10] The negation marker *ne–* is certainly a prefix, but it does not affect verbal aspect (Dambriūnas 1958: 255).

[11] Latv. *mirst* is also usually used with a prefix *aiz–* or *pie–*, see ME II: 634.

[12] The perfective forms can also indicate a resultative state, by taking a temporal phrase expressing the extension of time, as in (2d).

discussion. According to Ostrowski, verbs such as these that lack imperfective (= unprefixed) forms and for which only perfective forms are used (e.g., **žinti*, *pažinti* 'to get to know') are probably based on their preterit forms, which are descended from the older aorists. Their aoristic or perfective aspectual feature was reinforced in Balto-Slavic by adding a prefix (i.e., forming the perfective forms). From a phonological point of view, it cannot be clarified whether Lith. *mirš-* / Latv. *mirs-* is derived from the original present or aorist stem, since the root vocalism was the zero grade (**mṛs- > *mirś-*) in both tenses in the middle voice. Nevertheless, such a theoretical suggestion would speak for an old aorist as the origin of the preterit **miršā*.

§5. As related to the speculation above, an observation can be made of the cognates of Lith. *mìřti* / Latv. *mirt* and Lith. *mìřšti* / Latv. *mirst* from Indic (cf. 1 and 2 in §1). It is interesting to note that both the aorist and present injunctive forms are attested for √*mṛ*, while no present injunctive for √*mṛṣ* is found in the Titus Sanskrit database.[13] This contrast can be found only in Indic, because no inflectional forms of **mers-* were inherited by Slavic, but both imperfect (3pl. *mьrěxǫ*, Suprasliensis 398, 24) and aorist (3sg. *umьrětъ* Assemanianus 11c28, *mrětъ*, Assemanianus 11d2') forms are attested with regard to **mer-*.[14] This at least implies that both the imperfect and aorist categories were probably in use in Proto-Balto-Slavic, albeit the innovative formation of the Slavic imperfect. In fact, the present injunctive of √*mṛ* is not found in Rig Veda (RV) nor in Atharva Veda (AV), but when the corpora of Sama Veda Jaiminīya Brāhmaṇa (SV JB) and Jaiminīya Upaniṣad Brāhmaṇa (SV JUB) are included, a couple of them are found (e.g., 3sg. *mriyata* SV JB 1, 242, 34a; SV JUB 3, 8, 10a,), while that of √*mṛṣ* is not. Although the exact distinction between aorist and imperfect in the indicative mood has been the subject of much debate,[15] it seems clear that

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[13] All the Rigvedic and Atharvavedic data quoted here were taken from Hoffmann (1967). The data from Brāhmaṇas of Sama Veda were supplied by the database available at Titus (Available at: http://titus.fkidg1.uni-frankfurt.de/database/titusinx/wordwhl.htm#dStart [Accessed 1 March 2020]). Since the aspectual distinction between aorist and imperfect was obscured in the indicative mood but better preserved in the injunctive mood, I added the injunctive forms for the comparison. This kind of quick survey of the database is insufficient for knowing exhaustively the attestations of certain forms, but for the purpose of the current discussion, it suffices for seeing the general tendency of the state of attestations.

[14] Cf. Aitzetmüller 1977: 252, 664.

[15] The aorist indicative is usually thought to refer to the recent past, whereas the imperfect refers to the remote or historical past (Delbrück 1876; Tichy 1997); consequently, the imperfect is typically used in narratives in later Vedic texts (Hoffmann 1967). However, there are other views, as well. Some (e.g., Gonda 1962; Kiparsky 1998) assume that their functions are more aspectual than the

the aspectual distinctions were more persistent in the injunctive mood as well as in other non-indicative moods (Hoffmann 1967: 105–106). Therefore, the distribution of present and aorist injunctives of these verbal roots may indicate that, not only in Baltic but also in Indic, the root *mer- developed a dual-aspectual reading, while *mers- remained aoristic. It could be further inferred that this may have been previously triggered in PIE. This would not contradict the later lexical perfective aspect of PB *merś-.

§6. Far more importantly, the assumption that Lith. *mir̃šo* / Latv. *mìrsu* developed from thematic-aorist (as in Klingenschmitt 1982: 4) would fit better in the comunis opinio (cf. Stang 1942: 63–64, 190; Kortlandt 2005; Villanueva Svensson 2011, among others) that the middle root-aorist developed normally to the thematic aorist in Balto-Slavic and the *ā*-preterit in Baltic. Accordingly, Lith. *mir̃šo* / Latv. *mìrsu* would most likely be the regular Baltic outcome of the middle root aorist, while Lith. *mìrė* / Latv. *miru(ē)* may not. Now the question is where Lith. *mìrė* / Latv. *miru(ē)* comes from; then, whether it came from somewhere other than the middle root aorist. I would propose that Lith. *mìrė* / Latv. *miru(ē)* descended from the imperfect of the middle *ye/o*-present, and not the middle root aorist.

The middle root aorist may look, in semantic terms, to be more suitable for the predecessor of PB *mirē-, as this is basically non-durative but an aoristic root, and the root-aorist forms are actually attested in Slavic. Readers may wonder why the imperfect was chosen for the preterit of PB *miria-, while the aorist was rightly chosen for *mirśia-. For this point, I would like to draw attention to the fact that the grammatical aspect categories, aorist and imperfect, were lost in Proto-Baltic. Instead, the two stem formations with simple preterit semantic value were introduced and were then organized in a completely different way. Therefore, the semantic fit would probably not have been considered important, but the availability of the stem base would have mattered more, when the ancestral form of the preterit was chosen. As we have seen above, *mer- offered both the aorist and imperfect stems more or less equally, while *mers- offered the aorist stem remarkably more often than the imperfect, and that must have made the difference in their Baltic preterit stems.

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temporal remoteness of the past; still others (e.g., Vekerdi 1955) hold that there is no distinction of temporal remoteness, but their functions are purely aspectual (for a more detailed review of those theories, see Dahl 2010: 4ff.). In a relatively recent study by Dahl (2010: 437), it is suggested that the aorist denotes the general past and perfective aspect, while the imperfect is specific to the remote past and is aspectually neutral in Early Vedic.

§7. There are a couple of cases approximately parallel to **mers-*, where East Baltic has the *ā*-preterit paired to the original middle(-intransitive) **ya*-presents and the considerable sparsity of the present injunctive in Indic. For example, **sed-* 'to sit' is attested as *sésti*, *séda*, *sédo*, Latv. *sêst*, *sệstu*, *sệdu* in East Baltic, and as pass-aor. inj. 3sg. *sādi* (RV 7,73,2) in Vedic Sanskrit. In this case, the *ā*-preterit in East Baltic and the absence of present injunctive (middle) in early Vedic Sanskrit is again observed. In contrast, **men-* 'to remember' has the e-preterit in Baltic, and it is attested in the present injunctive several times (1sg. *manye* (RV 10,7,3), 2sg. *manyathaḥ* (RV 1,126,7), 3sg. *manyata* (RV 4,17,4); √*mṇ* 'to remember') as well as in the aorist injunctive (1sg. *maṁsi* (RV 7,88,2), 2sg. *manvata* (RV 4,1,16; RV 8,29,10a), 2sg. *maṁsthāḥ* (AV 9,5,4), 3sg. *maṁsta* (AV 8,1,12; AV 11,2,8). Needless to say, this pattern alone cannot be generalized to be the condition for a given verb to form the *ā*-preterit in Baltic, because the Baltic data cannot be directly compared to the Indic data. In fact, cases like Lith. *gẽso* (inf. *gèsti*, pres. *gẽsta*), Latv. *dzisu(ā)* (*dzist·*, *dziȩstu*) 'to go out', OCS pres. ppl. *gašǫšt·* ← **gas-je* (Tedesco 1948: 368–369), thematic aor. *-gase* 'to go out be extinguished' are found, too, where a present injunctive middle is attested (Skt. 3pl. mid. *dasyanta* [RV 5,45,3; 1x] 'to lay waste, be exhausted'), but no aorist injunctive middle is attested in Vedic. However, in the particular case of Lith. *mir̃ti* / Latv. *mirt* and Lith. *mir̃šti* / Latv. *mìrst*, the availability of the imperfect at the prehistorical stage seems to have contributed to the difference in their choices of their preterit stems.

§8. As anticipated above, we are now back to the problem of the presence and absence of *métatonie rude* in *mìršta* 'die(s)' and *mir̃šta* 'forget(s)', respectively. In both cases, the *sta*-present stem is not the original formation. Their original stem was, as we have seen above, the *ye/o*-stem with the zero-grade root, and it was replaced by the *sta*-stem, which has become the more productive inchoative stem. The *sta*-present suffix has been known to cause *métatonie rude* to the root syllable, and the acute tone in *mìršta* is the regular outcome of this stem formation. Therefore, the absence of *métatonie rude* in *mir̃šta* would instead call for a clarification.

Of course *métatonie rude* in *mir̃šta* can be considered as having been blocked to avoid a homonymic clash with *mìršta*, but it can also be interpreted as an indication that the form *mir̃šta* was created after the Baltic *métatonie rude* had ceased to operate. In this scenario, the original **ya*-present of **mers-* (i.e., **mirś-ya(-ti)*) would have survived longer than **mir-ya(-ti)*, which was replaced with the *sta*-present in early Proto-Baltic. Consequently, the preform of the preterit **mirśā-* would have been exposed longer to possible analogical pressure from its present stem **mirśya-*, if we start from the Proto Baltic pres. 3sg. **miryati* : pret.

miryā- :: *mirśyati* : *mirśā*, in the same fashion as Barton (1980) and Villanueva Svensson (2005). However, as the attested forms show, the *ya*-present stem of *mirśyati* did not have any analogical influence on its preterit stem, possibly because *miřšti* is not a typical transitive verb, whereby the pattern of *ia*-present and *ē*-preterit is particularly dominant.

§9. If it is true that *mers-* took the aorist-based stem simply because of its greater availability, while *mer-* chose the imperfect-based preterit stem when both aorist and imperfect stems were available, this might imply that the imperfect stems were in general preferred as the basis of the preterit stem in Proto-Baltic, rather than the aorist. This preference may be due to language contact with the Finnic languages, where only the imperfect was originally formed for the past-tense system (Laasko 2001: 190–191; 2011: 185).[16] It is known that Proto-Baltic lost the aspectual distinction it inherited from Proto-Indo-European and restructured its preterit system considerably, which has created nontrivial differences with the Slavic verbal system. Yet it is not known, or it is difficult to know, what led Proto-Baltic to restructure its preterit system, eliminating grammatical aspectual differences from the inflection. As research on the language contact between Finnic and Baltic languages has been advanced (e.g., Dahl, Koptjevskaja-Tamm (eds.) 2001; Junttila 2015), we are now arriving at a better position to assess the possibility that the Baltic preterit system might have been innovated under Finnic influence through language contact. The detailed investigation is, however, beyond the scope of this current contribution.

§10. This paper proposes that two verbs, Lith. *miřti* / Latv. *mirt* and Lith. *miřšti* / Latv. *mìrst*, take different preterit stems because their base forms were of different origins, namely the imperfect-based stem and the aorist-based stem. It has been proposed in previous studies that the *ē*-preterit stem of Lith. *miřti* / Latv. *mirt* is the result of analogy from its older *ya*-present stem on the ancestral form of the preterit stem (*-ā-* → *-iyā-* > *-ē-*). This sort of solution poses a problem in that it would not be compatible with the *ā*-preterit stem of Lith. *miřšti* / Latv. *mìrst*, which is also expected to have had the *ia*-present stem, based on its having an etymological background surprisingly analogous to that of Lith. *miřti* / Latv. *mirt*. The proposed solution assumes that the different preterit stems developed from imperfect and aorist stems, respectively, without requiring any analogical processes. Support for the assumption of these different stems of past value might be found in the Indic data, which preserve both present and aorist injunctives for *mer-*, but only aorist injunctives for *mers-*.

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[16] The two analytic past tenses, perfect and pluperfect, are not included in the discussion here.

Slavic offers subtle support by preserving only the reflections of *mer– (both imperfect and aorist are attested in OCS).

Given the fact that the *ē*-preterit is regular by the standards of the *ia*-presents in Baltic, the effect of the analogy proposed by Barton and advocated by Villanueva Svensson cannot be denied. Proposing a different source for this particular case of Lith. *miŕti* / Latv. *mirt* does not reject such an analogical process in general in the East Baltic verbal system. Instead, after the older *ya*-present stems were replaced by the *sta*-present (*mìršta*, (*už*)*miŕšta* as attested), the pattern of *ia*-present to *ē*-preterit remained as one of the most prominent models in East Baltic, and has continued to spread, at least in Lithuanian.

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Liet. *miȓti* / latv. *mirt* 'mirti' ir liet. *miȓšti* / latv. *mìrst* 'pamiršti' rytų baltų kalbose

SANTRAUKA

Veiksmažodžiai – liet. *miȓti* / latv. *mirt* 'mirti' ir liet. (–)*miȓšti* / latv. (–)*mìrst* 'pamiršti' – yra paliudyti rytų baltų kalbose, o giminiški žodžiai yra gana plačiai paliudyti kitose indoeuropiečių kalbose. Šių dviejų veiksmažodžių ir giminiškų žodžių analizė rodo, kad jie turi keletą bendrų istorinės morfologijos ypatybių: abu šie veiksmažodžiai turi esamojo laiko *sta*- kamieną, nepaisant giminiškų indoeuropietiškų esamojo laiko *-ye/o-* kamienų formų; iš indoeuropiečių prokalbės galima rekonstruoti, kad šių veiksmažodžių šakniniai aoristai linksniuojami kaip medijai; abu šie veiksmažodžiai pasižymi medijų semantika. Vis dėlto jų preteritų kamienai skiriasi: liet. *mìr*ė / latv. *mir*u (ē) ir liet. *miȓš*o / latv. *mìr*su (ā). Straipsnyje pateikiamas išsamus šių veiksmažodžių morfologijos priešistorės, semantikos ir leksikos aspektų tyrimas, įskaitant lyginamuosius duomenis iš slavų ir indų kalbų. Tyrimas suponuoja, kad liet. *miȓti* / latv. *mirt* leksinis veikslas galėtų būti imperfektinis arba aoristinis, priklausomai nuo konteksto, o liet. (–)*miȓšti* / latv. (–)*mìrst* atveju imperfektinė reikšmė yra reta; šis skirtumas galėjo egzistuoti dar priešistoriniame etape. Kita vertus, ankstesniame tyrime teigiama, kad iš aoristo kamienų kilę veiksmažodžiai dažnai neturi gramatinio imperfekto formų (t. y. neturi priešdėlių) baltų kalbose. Taip gali būti ir liet. (–)*miȓšti* / latv. (–)*mìrst* atveju, nes šis veiksmažodis retai vartojamas be priešdėlio. Taigi prielaida, kad liet. (–)*miȓšti* / latv. (–)*mìrst* tikriausiai yra kilęs iš aoristo kamieno, o liet. *miȓti* / latv. *mirt* galėtų būti kilęs iš senojo imperfekto kamieno, galimai susiformavusio iš esamojo laiko *-ye/o-* kamieno, patvirtinama tiek semantiniu, tiek formaliuoju aspektu. Senasis imperfekto kamienas *mirya*- tikriausiai gavo baltiško preterito kamieną sudarančią priesagą *-ā-*, iš kurios kilo *miryā*- ir išsirutuliojo į *mirē-* baltų prokalbėje. Daroma išvada, kad skirtingos liet. *miȓti* / latv. *mirt* 'mirti' ir liet. (–)*miȓšti* / latv. (–)*mìrst* 'pamiršti' preterito kamienų formos atspindi jų skirtingus istorinius kamienus, t. y. imperfekto ir aoristo kamienus, iš kurių jie ir kilo.

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