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## THE ORIGIN OF THE TYPE LITH. bliáuti, bliáuja, LATV. bļaût, bļaûju IN A BALTO-SLAVIC PERSPECTIVE

**1.** In Villanueva Svensson 2011, 317ff. I have tentatively proposed the following rules for the development of Proto-Indo-European (PIE) active root presents and aorists in Balto-Slavic:

i) PIE presents to "present roots" (usually lacking an aorist and a perfect in the parent language) acquired a zero-grade aorist (probably an " $\bar{a}$ -aorist") and infinitive stem.

ii) PIE root aorists (by definition derived from "aoristic roots") are continued as Balto-Slavic verbs with full-grade aorist-infinitive stem.

In this article I will test this hypothesis on a particular class of verbs, the type Lith. *bliáuti*, *-ja* and its Slavic congeners.

**2.** In East Baltic primary verbs to roots in °*au*- (PIE \*°*eu*-, \*°*eHu*-, \*°*euH*-) regularly present the following inflection: Lith. *bliáuti*, *bliáuja / bliáuna*, *blióvė*, Latv. *bļaût*, *bļaûju / bļaûnu*, *bļâvu* ( $\bar{e}$ ) "bleat". The corpus includes some 30 verbs, including such common items as Lith. *aũti* "put on (shoes)", *káuti* "beat; fight", *kráuti* "pile up", *pjáuti* "cut", etc. The evidence will be discussed in detail below (§ 7).

As it has long been recognized, there is plenty of evidence in Lithuanian and Latvian suggesting that the remarkable homogeneity of this class must recover a rather complex prehistory (e.g. Endzelin 1923, 604f.; Stang 1966, 358f.):<sup>1</sup>

**2.1.** Some verbs regularly present unpalatalized anlaut (e.g. Lith. *káuti*, Latv. *kaût*, etc.), whereas others are uniformly palatalized (e.g. Lith. *bliáuti*, Latv. *bļaût*, etc.). In addition, we find cases with both variants (e.g. Lith. *briáutis* beside *bráutis* "force one's way through", Lith. *šáuti* beside Latv. *šaũt* "shoot; shove").

<sup>&</sup>lt;sup>1</sup> The spread of *na*-presents over older *ja*-presents (Lith. *bliáuja*  $\rightarrow$  *bliáuna*, etc.) is known to be a fairly recent innovation and will be ignored in what follows. See Endze-lin 1923, 578; Kazlauskas 1968, 336 for more detailed treatments.

The development of PIE \**eu* in Baltic and Slavic is still disputed and cannot be properly discussed here (see most recently Derksen 2010, with references to earlier literature). Following the prevailing view I assume \**eu* > \**au* before vowels vs. \**eu* > \**iau* before consonants. If this is correct, initial palatalization points to an original full-grade *ie/o*-present and / or a full-grade aorist-infinitive stem, whereas lack of initial palatalization (leaving aside of course reflexes of PIE \*-ou(H)- or \*-*eh*<sub>2/3</sub>*u*-) points to a full-grade thematic present, a zero-grade present, or a zero-grade aorist-infinitive.

**2.2.** In Latvian most verbs from acute roots present *Brechton*, pointing to earlier mobility (e.g. *bļaût*, *raût* "pull up", etc.), but we also have a number of cases with *Dehnton*, pointing to earlier immobility (e.g. *šaũt / saũt*, *pļaũt* "cut", etc.).

Since the *Brechton* is expansive in Latvian, the possibility cannot be excluded that the *Brechton* has replaced an earlier *Dehnton* in some cases (cf. Villanueva Svensson 2011, 303, building on Rasmussen 1985[1999], 189). As far as the *Dehnton* is concerned, two possibilities come immediately to mind:

i) The *Dehnton* reflects an immobile present stem. On the evidence of Slavic, where *je*-presents are typically immobile whereas thematic presents are typically mobile, it is reasonable to suppose that the *Dehnton* points to an earlier *je*/*o*-present.

ii) The *Dehnton* reflects a root accented infinitive with full grade \*°*éHu-tei*or zero grade \*°*úH-tei*- (< \*°*eHu-téi*-, \*°*uH-téi*- through Hirt's law), but not \*°*euH-tei*-, as Hirt's law did not apply in ERH-sequences.

In cases of conflicting intonations the present stem probably imposed its intonation on the infinitive, cf. Latv. inf.  $du\delta t \rightarrow du\delta t$  "give" after pres.  $du\delta du$  (: Lith.  $duod\tilde{qs}$ ). Needless to say, the possibility can hardly be excluded that in some instances the acute full grade was extended from the aorist-infinitive stem.

**2.3.** Beside the regular  $\bar{e}$ -preterit Lith.  $k\acute{o}v\acute{e}$  / Latv.  $k\acute{a}vu$  some  $\bar{a}$ -preterits are attested in the dialects: Lith.  $\check{s}avo$ , kavo, Latv. kavu, javu "mixed", skavu "embraced". As traditionally assumed (e.g. Stang 1966, 358), the  $\bar{a}$ -preterit is best interpreted as having been built to an earlier thematic present \*kava, \* $\check{s}(i)ava$ , \*java, \*skava.

**2.4.** In addition to the dominant type  $bli\dot{a}uti$ ,  $bli\dot{a}uja/-na$ ,  $bli\acute{o}v\dot{e}$ , roots in °*au*- are also inflected according to some other minor conjugational patterns:

i) Anticausative-inchoatives with nasal or *sta*-present: Lith. *púti*, *pústa / pũva / pũna / púna*, *pùvo*, Latv. *pũt*, *pũstu*, *puvu* "rot". Similarly Lith. *žúti*, Latv. *pa-zūt* "perish"; Lith. *griúti*, Latv. *grût* "fall down" (: tr. Lith. *griáuti*, Latv. *graût* "demolish"); Lith. *džiúti*, Latv. *žût* "dry (intr.)" (: tr. Lith. *džiáuti*, Latv. *žaût* "hang up to dry"), and some other.

ii) Verbs with second stem in \*-*ē*-: Lith. *sravéti*, *srãvi* (OLith. act. pres. ptcp. *srãvančio* Daukša) "flow slowly", Latv. *sluvêt*, *sluvu / slavêt*, *slavu* "be famed".

The morphology of these two types is clearly conditioned by their semantics (the type *bliáuti* is typically composed of transitive verbs). The following verbs would in principle have been compatible with inflection according to the dominant type:

iii) In the case of Lith.  $a\tilde{u}ti$ , Latv. aut "put on (shoes)" and Lith. gauti "get", Latv. gaut "seize" the *na*-present and the  $\bar{a}$ -preterit show a broader dialectal distribution than it is usually the case with the type *bliauti*.<sup>2</sup>

iv) Zero-grade thematic presents: Lith. siúti, siùva (siũna), siùvo (siùvė) / Latv. šũt, šuvu (šuju, šūnu), šuvu "sew"; Latv. skũt, skuvu (skuju), skuvu "shave".

In two cases we have zero-grade verbs beside verbs of the type *bliáuti*, almost certainly through leveling of an earlier ablauting paradigm: Latv. *krūtiês*, *krūjuôs*, *kruvuôs* and *kruītiês*, *krūjuos*, *kruvuos* "intrude" ( $\leftarrow$  *krūtiês*, *krujuôs*, *kruvuôs*, cf. ME 2, 286) beside *kŗaũt*, *kŗaũju* "pile up"; Latv. *klùit*<sup>2</sup>, *kluju* "swallow, devour" ( $\leftarrow$  \**klūt*, *kluju*) beside *kļaût* "drink eagerly".

**3.** The few Old Prussian forms agree only in part with those of East Baltic: OPr. inf. *aulāut* (error for \**aulaūt*) "die" = Lith. *liáuti*, *liáuja* "stop".

OPr. inf. *-gaūt* "get, obtain" (pres. *-gaunai*, 1 pl. *-gaunimai*) = Lith. *gáuti*, *gáuna* "get".

OPr. acc. sg. *aumūsnan* "abwaschung" implies an inf. \**mūt* "wash, bath" in contrast with the full grade of Latv. *maût*, *maûju* "swim, submerge".

OPr. inf.  $kr\bar{u}t$  "fall" is probably an anticausative of the type Lith.  $d\check{z}i\check{u}ti$  (: tr.  $d\check{z}i\acute{a}uti$ ), be it from a primary verb cognate with Lith.  $kr(i)\acute{a}uti$  "pile up", as per Mažiulis 1993, 288f., or for  $*gr'\bar{u}t$  = Lith.  $gri\check{u}ti$  "fall down" (: tr.  $gri\acute{a}uti$  "demolish"), as per Smoczyński 2005, 205. Accordingly, it doesn't provide information on the morphology of the primary (transitive) verbs.

<sup>&</sup>lt;sup>2</sup> In Lithuanian only the  $\bar{e}$ -preterit  $\tilde{a}v\dot{e}$  is attested, but with unexpected full grade instead of the lengthened grade of *blióvė*, *džióvė*, etc.

4. The results of the preceding survey are reasonably clear. In the present stem (East) Baltic must have inherited both full grade thematic presents in  $*^{\circ}a\mu$ -a (\*kava, \*java, etc.) and *ia*-presents in  $*^{\circ}a\mu$ -*ia* that served as the model for the regularization of the whole class. In addition, it must have inherited zero-grade presents in  $*^{\circ}u\mu$ -a (e.g. Lith.  $si\lambda va$ ) and perhaps in  $*^{\circ}\dot{u}$ -*ia* (unattested). It is unclear whether other present stems can be postulated (leaving aside, of course, the type  $p\dot{u}sta / p\ddot{u}va$ ).

The preterit is fully uninformative, as both the  $\bar{e}$ -preterit (*blióvė* etc.) and the reliquary  $\bar{a}$ -preterit (*siùvo*,  $k\bar{a}vo$ ) are entirely predictable. As for the infinitive stem, it is clear that zero-grade infinitives must have been quite widespread. Full-grade infinitives, on the other hand, must also have been present, as their expansion would otherwise be difficult to understand.<sup>3</sup>

These findings, however, only partially clarify the prehistory of the type *bliáuti*. Note, for instance, that they allow for an impressive number of combinatory variants between the present stem and the (aorist-)infinitive stem. A more detailed account should, I believe, be able to answer the following questions:

- a) What was the inflection of every primary verb in Proto-Baltic and Proto-Balto-Slavic? Which were the major types at these stages?
- b) How did these patterns originate in an Indo-European perspective?
- c) How did they develop into the (East) Baltic system?

**5.** In order to answer these questions it is necessary to take the Slavic facts systematically into account. I give a list of the reconstructed Common Slavic verbs:<sup>4</sup>

Verbs without second stem in *-a-*:

- a) Full grade infinitive, full grade *e*-present: *\*sluti*, *\*slovo* "be called, be famous"; *\*pluti*, *\*plovo* "swim, sail"; *\*r(j)űti*, *\*rovo* "roar"; *\*truti*, *\*trovo* "feed".
- b) Full grade infinitive, full grade *je*-present: \*čűti, \*čűjǫ "feel, notice";
   *\*-űti*, \*-űjǫ "put on / take off (shoes)".

 $<sup>^3</sup>$  The traditional assumption that the infinitive regularly displayed zero-grade of the root (e.g. Endzelin 1923, 604f.; Stang 1966, 359) is certainly an oversimplification.

<sup>&</sup>lt;sup>4</sup> A recent treatment of the morphology of Slavic primary verbs to roots in  $^{\circ}eu(H)$ can be read in Reinhart 2003, 150ff., on which my own survey is based. I refer to Vaillant 1966, 196ff., 201ff., 282ff. and the standard etymological dictionaries for further elaboration of the Slavic data. The reconstruction of the Slavic accentual paradigms is taken from Dybo 1981, 203ff.

c) Zero grade infinitive, zero grade *je*-present: \**krỹti*, \**krỹjq* "cover, hide";
\**mỹti*, \**mỹjq* "wash"; \**nỹti*, \**nỹjq* "grow slack"; \**rỹti*, \**rỹjq* "dig, root";
\**tỹti*, \**tỹjq* "become fat"; \**vỹti*, \**vỹjq* "low, roar"; \**šĩti*, \**šĩjq* "sew" (< \**siū*-).

Verbs with second stem in -a-:

- d) Full grade infinitive, full grade *e*-present: \*koväti, \*kovo "forge";
   \*snoväti, \*snovo "warp".
- e) Zero grade infinitive, full grade *e*-present: \**zъvấti*, \**zồvǫ* "call".
- f) Zero grade infinitive, zero grade *e*-present: \**rъvãti*, \**rъvq* "tear".
- g) Zero grade infinitive (with analogical palatalization), full grade *je*-present: \**bl'ъvãti*, \**bljűjq* "spit, vomit"; \**kl'ъvãti*, \**kljűjq* "peck";
   \**po-l'ъvati*, \**-ljujq* "defecate"; \**pl'ъvãti*, \**pljűjq* "spit"; \*šč*ъvãti*, \*šč*űjq* "course (with dogs)".
- h) Zero grade infinitive, zero grade *je*-present: \*kъvati, \*kýjǫ "nod";
   \*žъväti, \*žijǫ "chew" (< \*ziū-).</li>

It is noteworthy that virtually all theoretical combinations that can be postulated on an internal analysis of Baltic are in fact attested in Slavic. In the present stem we have both \*-e/o- and ie/o-presents. As far as root vocalism is concerned, in addition to the types already known from Baltic we have a well-represented class of zero-grade ie/o-presents (e.g. \* $kr ÿ j q \sim$  Lith.  $kr(i) \dot{a} u j a$ ). Unlike in Baltic, zero grade predominates in the aorist-infinitive stem (\*kr ÿ t i, \* $b l^{2} b v \ddot{a} t i$ , etc.), but full grade is also reasonably well attested (\* $\check{c} u t i$ , \* $kov \ddot{a} t i$ , etc.). Finally, a Slavic peculiarity are the verbs with a second stem in  $-\bar{a}$ -, almost certainly pointing to an original  $\bar{a}$ -aorist.

**6.** We are now in a position to address the evidence. As stated above (§ 1), PIE present and aoristic roots would be more clearly distinguished by the root vocalism of the aorist-infinitive stem: zero grade in the case of present roots vs. full grade in the case of aoristic roots. Furthermore, it is reasonable to assume that root athematic presents were routinely thematized or remade as ie/o-presents at an early date.<sup>5</sup> The morphology of the present stem of aoristic roots is more difficult to establish. Since the most common

<sup>&</sup>lt;sup>5</sup> This statement is apparently contradicted by the abundance of root athematic presents in Old and dialectal Lithuanian. In this language, however, athematic presents display a characteristically "middle" profile (see e.g. Stang 1966, 310ff.). I thus assume that in Balto-Slavic "(active-)transitive" and "(middle-)intransitive" presents and aorists developed in different ways.

PIE present stems beside root aorists (reduplicated and nasal presents) were generally disfavored in Balto-Slavic,<sup>6</sup> it seems that "aoristic roots" frequently acquired a thematic or *ie/o*-present, just like the "present roots". Other types, however, are also attested (e.g. zero-grade presents like OCS -stbr(j)q beside aor. -strě(tb), inf. -strěti "stretch").<sup>7</sup>

7. Present roots.

**7.1.** Our hypothesis predicts a full-grade present (3 sg.  $^{\circ}a\underline{u}-e-t\hat{i}$  or  $^{\circ}a\underline{u}-\underline{i}e-t\hat{i}$ ) pared with a zero grade aorist-infinitive stem (inf.  $^{\circ}u\underline{i}-tei$ -; aor.  $^{\circ}u\underline{u}-a-?$ ). This is confirmed in the following cases:

**7.1.1.** Lith. *ráuti*, *ráuja*, *róvė*, Latv. *raût*, *raûju*, *râvu* (ē) "pull (up)"; Sl. *\*rýti*, *\*rýjq* AP a "dig, root" (OCS *ryti*, *ryjq*, SCr. *riti*, *rijēm*, Ru. *ryt*', *róju*, etc.), *\*rъváti*, *\*rъvq* AP c "tear" (CS *rъvati*, *rъvq*, SCr. *rvati*, *rvēm* se, Ru. *rvat*', *rvu*, etc.).

PIE pres. \* $r\acute{e}uh_{2/3}-ti$  / \* $ruh_{2/3}-\acute{e}nti$  (LIV, 510):<sup>8</sup> TB pres. V rwatar, TA inf. rwatsi "pull out"; Lat. ruo, -*ere* "tear, pull up"; ON  $r\acute{y}ja$  "tear out wool"; Ved. subj.  $r\acute{a}vat$  "wound"? (the root  $rav^{(i)}$ - is poorly attested, cf. Narten 1964, 224f.).

All Slavic forms present zero grade of the root. The *je*-present \*r y j q may easily be an innovation on the infinitive. We can thus reconstruct an infinitive Bl.-Sl.  $*r \dot{u}$ -tei- (< \*ruH-tei-). The Balto-Slavic paradigm must have included a form with full grade, as Lith. *ráuti*, Latv. *raût* would otherwise be left unexplained. The *Brechton* of Latvian *raût* favors a thematic present \*reuH-e/o-(the Baltic *ia*-present is uninformative), but since the *Brechton* is expansive in Latvian this argument is not conclusive. A thematic present \*reuH-e/o- is

<sup>&</sup>lt;sup>6</sup> In Balto-Slavic and Germanic nasal presents became associated with the anticausative-inchoative class of verbs.

<sup>&</sup>lt;sup>7</sup> I have excluded from consideration some items that probably did not belong to the "active-transitive" class. Thus, Sl. \**sluti*, \**slòvo* "be called, be famed" (OCS *sluti*, *slovo*, etc.) can hardly continue the PIE active system pres. \* $\hat{k}_l$ -*né*-*u*-*ti*, aor. \* $\hat{k}l\acute{e}u$ -*t* "hear", as indicated both by its meaning and by the Latvian cognate *slavêt*, *slavu* (*sluvêt*, *sluvu*) "be famed". Sl. \**pluti*, \**plòvo* "swim, sail" (OCS *pluti*, *plovo*, etc.) may continue a paradigm with second stem in \*- $\bar{e}$ - pres. \**pléu*-*e*/*o*-, inf.-aor. \**pleu*- $\bar{e}$ -, as suggested by the parallelism with OLith. *sravéti*, *srāva* "flow slowly", Lith. *tekéti*, *tẽka* "flow, run". A more detailed account of Sl. \**pluti*, \**sluti* will be presented elsewhere. Lith. *pláuti*, *pláuja*/*-na* "wash, rinse" probably continues a Narten causative \**plōu*-*éie*-*ti*, cf. F e c h t 2007, 386.

<sup>&</sup>lt;sup>8</sup> Beside forms going back to a *set*-root \**reuh*<sub>2/3</sub>- some *anit*-forms are also attested (Ved. *rutá*-, Lat. -*rŭtus*). Discussion in Seldeslachts 2001, 127ff., with references.

in any case probably indirectly continued in Sl.  $*r\bar{b}v\rho$  (with zero grade secondarily taken from the aorist-infinitive stem). All this points to Bl.-Sl. pres.  $*ra\mu-e/o-$ , inf.  $*r\bar{u}-tei-$ , aor.  $*ru\mu-\bar{a}-$  (?). I don't have a definitive answer for the unique presence of  $*r\tilde{y}ti$  beside  $*rbv\tilde{a}ti$  in Slavic, but I strongly suspect that it reflects split of an earlier paradigm involving an innovated zero grade present  $*ru\mu-e-$  and in infinitive  $*r\bar{u}-ti$ .

**7.1.2.** Sl. \**žъvấti*, \**žîj*ǫ AP c "chew" (CS *žъvati*, *žije*-, RuCS *žъvati*, *žuju*, Ru. *ževáť*, *žujú*, OCz. *žváti*, *žuju*, etc.).

PIE pres. \*ĝiéuH-ti / \*ĝiuH-énti (LIV, 168): TB pres. V śuwam, TA śwāş "eats"; Gmc. \*kewwan "chew" (OHG kiuwan etc.).

If Lith. *žiáuna* AP 1 "jaw", Latv. *žaũnas* "id." (: Bulg. *žúna* "lip") is to be understood as a derivative of the Balto-Slavic verb (so e.g. Smoczyński2003, 103), this seems to imply that Sl. *\*zjū-je-*, *\*zjuv-ā-* has replaced a paradigm with full grade in some forms, most probably pres. *\*źjāu-je/o-*, inf. *\*źjū-tei-*, aor. *\*źjuu-ā-*. The immobility of *žiáuna* supports reconstructing a full grade *je/o-*present for Balto-Slavic.

**7.1.3.** Sl. \**kъvati*, \**kyjq* "nod" (CS *kъvati*, *kyjq*; otherwise iter. *kyvati*, -*ajq*: Ru. *kiváť*, Slvn. *kívati*, Cz. *kývati* etc.; cf. Vaillant 1966, 284).

The only relatively certain cognate is Lat.  $c\bar{e}ue\bar{o}$ ,  $-\bar{e}re$  "wiggle (the hips)", probably replacing earlier  $c\bar{e}u\bar{o} < *keh_1\underline{u}-e/o$ -, cf. Vine 2006, 218. If so, a root athematic present  $*keh_1u$ -  $/ *kh_1u$ - (>  $*kuh_1$ -) seems the easiest way to reconcile the Latin and Slavic forms. As in the case of  $*\check{z}bv\check{a}ti$  "chew", the Slavic paradigm must have been rebuilt on zero-grade inf.  $*k\bar{u}$ -tei-, aor.  $*ku\underline{u}$ - $\bar{a}$ -.

**7.1.4.** Lith. *bliáuti*, *bliáuja*, *blióvė*, Latv. *bļaût*, *bļaûju*, *bļâvu* (*ē*) "bleat"; Sl. \**bl'ъváti*, \**bljűjǫ* AP a "spit, vomit" (OCS *bl'ъvati*, *bljujǫ*, SCr. *bljùvati*, *bljùjēm*, Ru. *bleváť*, *bljujú*, etc.).

PIE pres. \**bléuH-ti / \*bluH-énti* (LIV, 90): Gk. φλέω "overflow", φλύω "be full of juice, thrive" (also "vomit"); Lat. *fluō*, *-ere* "flow, stream".

The semantic development of Baltic is surprising, but probably not enough to deny the traditional etymology. Within our framework we expect Bl.-Sl. inf. \* $bl\bar{u}$ -tei-, aor. \* $blu\bar{u}$ - $\bar{a}$ -, almost directly continued in the Slavic second stem (with secondary extension of \* $-\bar{a}$ - to the infinitive; the palatalized anlaut \* $bl\nu^{\circ} \rightarrow *bl'\nu^{\circ} > *bl'\nu^{\circ}$  is clearly taken from the present). A <u>ie/o</u>-present \* $bl\acute{e}uH$ -<u>ie/o</u>- > \* $bl\underline{i}au$ -<u>ie/o</u>- is indicated by Sl. \* $bl\underline{j}u\underline{j}au$  and by the palatalized anlaut of Baltic. Latv.  $b\underline{j}aut$  instead of \* $b\underline{j}aut$  must reflect the widespread expansion of the *Brechton* in this language. A relic of the original intonation may be preserved in the derivative Latv. *bļāva* "loudmouthed" beside *bļâva*.

**7.1.5.** Lith. spjáuti, spjáuja, spjóvė, Latv. spļaũt, spļaũju, spļāvu "spit"; Sl. \*pl'vváti, \*pljűjǫ AP a "id." (CS plvvati, pljujǫ, SCr. pljùvati, pljùjēm, Ru. pleváť, pljujú, etc.).

PIE pres. \*sptį́euH-ti / \*sptį́uH-énti (vel sim.; LIV, 583): Ved. -sִtīvati; Gk. πτύω; Lat. spuō, -ere; Gmc. \*spīwan (Go. speiwan etc.).<sup>9</sup>

Bl.-Sl. pres. \* $spi\bar{a}u$ -ie/o-, inf. \* $spi\bar{u}$ -tei-, aor. \*spiuu- $\bar{a}$ -. A full-grade ie/o-present is practically assured by Sl. pljuje-, by the palatalized anlaut of Baltic, and by the Latvian *Dehnton*.

**7.1.6.** Lith. siúti, siùva (siũna), siùvo (siùvė), Latv. šũt, šuvu (šuju, šūnu), šuvu "sew"; Sl. \*šíti, \*šíjǫ AP a "id." (CS šiti, šijǫ, SCr. šìti, šìjēm, Ru. šiť, š'ju, etc.).

PIE pres. \* $siuh_1$ -ie/o- (\* $sih_1u$ -ie/o-; LIV, 545) "sew": Ved. sivyati; Gmc. \*siujan (Go. siujan etc.); Lat.  $su\bar{o}$ , -ere.

Bl.-Sl. pres.  $s_{i}ii_{-ie/o-}$  (<  $s_{iu}H_{-ie/o-}$ ), inf.  $s_{i}ii_{-tei-}$  (<  $s_{iu}H_{-tei-}$ ), aor.  $s_{iu}u_{-\bar{a}-}$  (?), almost linearly continued in Slavic.<sup>10</sup> Considering its isolation, the Baltic present  $s_{iu}u_{-a-}$  can hardly be old (Baltic has no zero-grade *ie/o*-presents to au-roots).<sup>11</sup> It was probably back formed to inf.  $s_{i}ii_{-tei-}$ , aor.  $s_{iu}u_{-\bar{a}-}$  at an early date.

**7.2.** In the following cases a PIE root athematic present seems certain, but a Balto-Slavic paradigm pres.  ${}^{\circ}\bar{a}\mu$ -(*i*)*e*/*o*- : aor.-inf.  ${}^{\circ}\bar{u}$ -/ ${}^{\circ}u\mu$ -, although plausible, cannot be reconstructed on internal evidence:

<sup>&</sup>lt;sup>9</sup> A root athematic present is the easiest way to account for the disagreement between the full-grade present of Balto-Slavic and the zero grade of Indo-Iranian and Greek. *Pace* LIV, there is no reason to suppose that this was an aoristic root: Lat. *-spuī* is ambiguous, whereas the isolated Ved. *aṣṭhaviṣam* (GB) may easily be analogical (cf. Narten 1964, 261).

<sup>&</sup>lt;sup>10</sup> If Ved. *sīvyati* indicates that the PIE present was  $*sih_1u-ie/o-$  (metathesized from  $*siuh_1-ie/o-$ , cf. Eichner 1988, 135), the present \*siuH-ie/o- of Sl. \*sijo may owe its root shape to the infinitive stem \*siuH- (itself once again metathesized from \*siHu-) or to the \*siuH- of other derivatives.

<sup>&</sup>lt;sup>11</sup> Lat. su $\bar{o}$ , to be sure, could go back to \*siuH-e/o-, thus providing a potential comparandum for Lith. siùva, Latv. šuvu, but there are various strategies justifying \*siuH-ie/o- > Lat. su $\bar{o}$  instead of \*s $\bar{io}$  ("pius-rule"), cf. Meiser 1998, 227; de Vaan 2008, 600.

**7.2.1.** Lith. *jaũti / jáuti*, *jaũja / jáuja*, *jõvė / jóvė*, Latv. *jàut / jaût*, *jàuju*, *jàvu* ( $\bar{e}$ ) / *javu* ( $\bar{a}$ ) "mix".

PIE \**iéu-ti / \*iu-énti* (LIV, 314): Ved. pres. *yuvá-* "join, fasten", athem. ptcp. *ni-yuvāná-* RV, inj. 3 pl. *á yavan* AV, pres. *yauti* TS (cf. Hill 2007, 206ff.).

The variants with acute intonation are clearly secondary. The  $\bar{a}$ -preterit Latv. *javu* points to a thematic present \**java*.

**7.2.2.** Lith. *džiáuti*, *džiáuja*, *džióvė*, Latv. *žaût*, *žaûju*, *žâvu* ( $\bar{e}$ ) "hang up to dry".

? PIE \* $d^{h}euH$ - "move swiftly, shake" (LIV, 149f.): Ved. pres.  $dh\bar{u}n \delta ti$ "shake",  $dh\bar{a}vati$  "rub; wash",  $dh\bar{u}vati$  "throw down" (cf. Gotō 1987, 185ff., Hill 2007, 183ff.); Gk.  $\theta\bar{\upsilon}\omega$ ,  $\theta\upsilon\omega$ ,  $\theta\bar{\upsilon}\nu\omega$  "rush, rage"; ON  $d\dot{y}ja$  "shake, toss".<sup>12</sup>

The palatalized anlaut points to a  $\underline{i}e/o$ -present  $*d^{h}\underline{e}uH-\underline{i}e/o->*d\underline{i}\underline{a}u-\underline{i}e/o-$ . The *Brechton* of Latv.  $\underline{z}a\hat{u}t$  must thus be secondary (cf. Lith.  $d\underline{z}i\delta vimas$  AP 1 beside  $d\underline{z}i\delta vimas$  AP 2; LKŽ 2, 1023f.).

Since *jaũti* and *džiáuti* are only attested in East Baltic, the possibility that they presented a zero-grade aorist-infinitive stem cannot be tested.

**7.2.3.** Sl. \**týti*, \**týjo* AP *a* "grow fat" (SCr. *titi*, Cz. *týti*, Ukr. *tyty*, etc.). PIE \**téuh<sub>2</sub>-ti* / \**tuh<sub>2</sub>-énti* (LIV, 639f.): Ved. *tavīti* "becomes strong".

According to Smoczyński 2003, 123, the causative \*tăviti (Slvn. o-táviti, SCr. dial. ò-taviti se, Cz. z-o-taviti se) implies a present \*tovo as its derivational base, thus pointing to Bl.-Sl. pres. \*teuH-e/o-, aor.-inf. \*tuH-. But this is uncertain. As per Vaillant 1966, 424, the parallel causatives Sl. \*plăviti "float", \*slăviti "glorify" were derived from the inchoatives \*plýnoti "flow, stream" (Pol. płynąć, Cz. plynouti; secondary SCr. plìti, plìjēm, Ru. plyt', plyvú), \*slýnoti "become known" (Pol. słynąć, Cz. slynouti; secondary Ru. slyt', slyvú). Considering the semantics of \*týti, the possibility cannot be excluded that it was inflected as a regular anticausative already in Balto-Slavic: pres.

<sup>&</sup>lt;sup>12</sup> I cannot devote the necessary space to argue for this etymology, which as far as I know is proposed here for the first time. Note meanings like "do something violently", "beat", "run", "steal" beside "hang up to dry" in Lithuanian (LKŽ 2, 1016ff.). Latv. *žaût* II "beat; drill; pour; rain heavily" (ME 4, 793) probably belongs with *žaût* I "hang up to dry" as well. See Fraenkel LEW, 117 for older proposals. Smoczyński (2003, 57ff.) relates Lith. *džiáuti* to Sl. \**dűti*, \**dỹti* "blow" (see below § 9.2), which is semantically problematic.

\*tū-ne/o- or \*tū-ste/o-, inf. \*tū-tei-, aor. \*tuu-e/o-, later regularized as \*týti, \*týjǫ (cf. Lith. tùkti, tuñka, Latv. tûkt, tûkstu "become fat").

**7.2.4.** A similar case is Sl. \**nyii*, \**nyjo* AP *a* "grow slack" (OCS *u*-*nyti*, -*nyjo*, OCz. *nyti*, *nyju*, ORu. *nyty*, *nyju*, etc.), caus. \**naviti* (OCz. *navti* "torment", Ru. dial. *o*-*návitsja* "get tired"). Primary verbal formations of \**neuH*-(Go. *naus* "cadaver", Latv. *nâve* "death", TB *naut*-, TA *nut*- "disappear", etc.) are otherwise unknown.

**7.3.** In the following cases a Balto–Slavic paradigm pres.  ${}^{\circ}\bar{a}\mu$ -(*i*)*e*/*o*- : aor.inf.  ${}^{\circ}\bar{u}$ -/ ${}^{\circ}u\mu$ - can be safely reconstructed, but derivation from a PIE root athematic present is for one or another reason not absolutely certain.

**7.3.1.** Latv. maût, maûju, mâvu ( $\bar{e}$ ) "swim, submerge" (Lith. máudyti "bath"); OPr. \* $m\bar{u}t$  "wash, bath" ( $aum\bar{u}snan$ ); Sl. \*mýti, \*mýj $\rho$  AP a "wash" (OCS myti, myj $\rho$ , SCr. mìti, mìj $\bar{e}m$ , Ru. myt', móju, etc.).

Lith. máuti, máuja, móvė, Latv. maût, maûju, mâvu (ē) "put on (clothes).

? PIE \**miéuh*<sub>1</sub>-*ti* / \**mih*<sub>1</sub>*u*-*énti* "move" (LIV, 445f.): Ved. *mīvati* "pushes"; TB pres. I *miwäm*, TA I/II *meş*, 3 pl. *meyeñc* "tremble"; Lat. *moueō*, -*ēre* "move".<sup>13</sup>

A connection between the two Balto-Slavic word-families has often been assumed (e.g. LIV), but this is semantically problematic. If they are separated (e.g. Fraenkel LEW, 417, 421), the material usually cited in support of a root \**meuH*- "urinate; wash" (Ved. *mútra*-, Av. *műθra*- n. "urine", OIr. *mún* "id.") does not permit reconstructing the Indo-European *averbo*. The Balto-Slavic facts, in any case, clearly point to a paradigm pres. \**mãu*-(*i*)*e*/*o*-, inf. \**mú*-*tei*-, aor. \**muu*-*ā*-.

A connection of Lith. *máuti*, Latv. *maût* "put on / take off (clothes)" with \**mieuh*<sub>1</sub>- "move", on the other hand, is at least conceivable from a semantic point of view (note meanings like "thrust, stab", "rush", "throw", "push", "strike"; LKŽ 8, 946ff.). For PIE we can safely reconstruct a root athematic present, but the prehistory of the East Baltic verb can not be reconstructed on the available evidence.

**7.3.2.** Lith. káuti, káuja, kóvė / kãvo, Latv. kaût, kaûju, kâvu ( $\bar{e}$ ) / kavu ( $\bar{a}$ ) "beat, slaughter; fight"; \*kováti, \*kồvǫ AP c "forge" (OCS kovati, kovǫ, SCr. kòvati, kùjēm, Ru. kovát', kujú, etc.).

<sup>&</sup>lt;sup>13</sup> See V i n e 2006, 218f. for the reconstruction of an athematic (or thematized) root present or aorist in the prehistory of Italic. It is unclear to me whether Hitt. *mau-/mu-<sup>bhi</sup>/maušš-<sup>zzi</sup>* "fall" belongs in this root, as traditionally assumed. See P u h v e l 2004, 105 for a different etymology.

PIE \* $keh_2u$ - "beat; split" (LIV, 345f.): TB kau-, TA ko- "kill" (TB pres. VIII kauṣām, subj. I kowān, pret. III kausa); Gmc. \*hawwan "hew" (ON hoggva, OHG houwan etc.); Lat.  $c\bar{u}d\bar{o}$ , -ere "beat, forge".<sup>14</sup>

It is unclear to me whether we should reconstruct an aoristic root, a present root, or a *u*-present  $*keh_2-u-$  /  $*kh_2-u-$ .<sup>15</sup> Germanic, Baltic and Slavic, in any case, clearly demand a common (and innovated) present stem  $*kauh_2-e/o-$ . The imperfective CS *o-kyvati*, SCr. *o-kívati* probably points to a zero grade in the prehistory of Slavic, cf. Vaillant 1966, 491. If so, we can start from a Balto-Slavic paradigm pres. \*kau-e/o-, inf.  $*k\bar{u}-tei-$ , aor.  $*kuu-\bar{a}-$ , hence from a present root at least as far as the northern languages are concerned (note, in addition, that the Slavic second stem in *-a-* would be unexpected in an aoristic root).

**7.3.3.** A similar case is Sl. \*snováti, \*snövo AP c "warp" (CS snovati, snove-, SCr. snovati, snùjēm, Ru. snovát', snujú, etc.), with imperfective OCS o-snyvati, SCr. o-snívati beside Slvn. na-snâvati, cf. Vaillant 1966, 203. The LIV, 575 reconstructs an athematic present \*sneuH- / \*snuH- on the internal evidence of Germanic: Go. sniwan, OE sneōwan "hasten" (< \*sneu-) beside ON snúa "turn" (< \*snū-).

7.3.4. Lith. pjáuti, pjáuja, pjóvė, Latv. pļaũt, pļaũju, pļãvu (ē) "cut, mow".

PIE \*pieh<sub>2</sub>-u- (LIV, 481): Gk. πταίω "nudge, stumble", παίω "strike, hit"; Lat. *pauiō*, -*īre* "strike". See Hackstein 1992 for further material (Gk. πτοάω "frighten, scare", TB *pyāk*- "strike, beat", etc.).

The LIV sets up a *u*-present  $*p\underline{i}\ell h_2$ -*u*- /  $*p\underline{i}h_2$ -*u*-' for Greek, Latin and Baltic. If this is correct, -*u*- must have been felt as part of the root very early. The *Dehnton* of Latv.  $p\underline{j}a\overline{u}t$  is easiest explained by assuming a  $\underline{i}e/o$ -present, which could even be Indo-European in date (: Gk.  $\pi(\tau)\alpha(\omega)$ , Lat. *pauiō*?). A zero grade inf.  $*p\underline{j}uti$  (<  $*p\underline{i}uH$ - <  $*p\underline{i}Hu$ -) is mildly supported by material like Lith.  $p\underline{j}udyti$  'hound, bait'',  $p\underline{j}uklas$  "saw", OPr. *piuclan* "sickle", cf. Smoczyński 2003, 80.

<sup>&</sup>lt;sup>14</sup> It is doubtful whether Gk. κεάζω (κείων Hom. 1x), aor. κέασσαι "split" belong in this root (so e.g. LIV). It would require \**keuh*<sub>2</sub>-, in contradiction with the root \**keh*<sub>2</sub>*u*-that Tocharian demands. See Beekes 2010, 661f. for an alternative etymology of Gk. κεάζω.

<sup>&</sup>lt;sup>15</sup> A *molo*-present, as tentatively reconstructed by K  $\ddot{u}$  m m e1 (2004, 153), is unlikely because of the athematic subjunctive of Tocharian (TA them. 3 pl. *kāweñc* is secondary, cf. Malzahn 2010, 607).

**7.3.5.** Sl. \**zъvấti*, \**z*ồvǫ AP c "call" (OCS *zъvati*, *zov*ǫ, SCr. *zv*àti, *zòvēm*, Ru. *zvát*', *zovú*, etc.).

PIE \* $\hat{g}^{h}euH$ - / \* $\hat{g}^{h}\mu eH$ - "call, invoke" (LIV, 180f.): TB pres. V  $kw\bar{a}t\ddot{a}r$  "calls";<sup>16</sup> In.-Ir. \* $f^{h}\mu\mu$ - / \* $f^{h}\mu aH$ - "invoke", presenting a particularly complicated picture: i) pres. I Ved.  $hv\dot{a}yati$ , YAv. zbaiieiti; ii) pres. II Ved.  $h\dot{a}vate$ , YAv. zauuaiti; iii) pres. III Ved. 1 sg.  $huv\dot{e}$ , 1 pl.  $h\bar{u}m\dot{a}he$ ; iv) athem. (pres. or aor.) Ved. 1 sg. ahvi, 1 pl.  $\dot{a}h\bar{u}mahi$ , ptcp.  $huv\bar{a}n\dot{a}$ -, subj. 1 pl.  $h\dot{a}va\bar{a}mahi$ ; v) aor. Ved.  $\dot{a}huvat$ .

Traditionally a root athematic present is reconstructed on the evidence of Ved. *huvé*, *hūmáhe* and TB *kwātär*. This, however, leaves the thematic aorist *áhuvat* unaccounted for. According to an alternative approach (going back to Renou 1925, 310), Ved. *áhuvat* continues a middle root aorist \**ah<sub>u</sub>va*, still preserved in *ahvi*, *áhūmahi*, *huvāná*-. Gotō (1987, 349) explains *huvé*, *hūmáhe* as artificial forms formed to aor. inj. 1 sg. *huvé*. Under both interpretations the thematic present Ved. *hávate*, YAv. *zauuaiti* (: Sl. \**zõvq*?) is best taken as a displaced subjunctive.

If one starts from a PIE present root, the morphology of Sl. zviit, zviitfully fits our expectations. If, on the other hand, one posits an aoristic root, it provides an apparently strong counterexample – but perhaps not a fatal one. It is interesting to observe that this root presents an overtly middle profile. One could thus start from a PIE middle root aorist  $\hat{g}^h out - e / \hat{g}^h ut - re$  and assume that it was thematized as  $\hat{g}^h ut - \hat{e} - t$  in (pre-)Balto-Slavic (cf. Ved. ahuvat). The resulting paradigm Bl.-Sl. pres.  $\hat{g}^h eut - e - ti$  (< aor. subj.? Cf. Ved. havate), inf.  $\hat{g}^h ut - tei$ -, aor.  $\hat{g}^h ut - e - t$  was unstable, as thematic aorists typically belonged to the anticausative-inchoative system. It could easily have been regularized as  $\hat{g}^h eut - e/o -, \hat{g}^h ut - tei -, \hat{g}^h ut - \bar{a} -, finally leading to Sl.$  $<math>zviit, zviit, zvii, zvii, the averbo of PIE <math>\hat{g}^h eut - / \hat{g}^h uet - i$  is still unsettled. Accordingly, the exact prehistory of Sl. zviiti remains unclear.

**7.4.** In the following cases a Balto-Slavic paradigm pres.  ${}^{\circ}\bar{a}\mu_{-}ie/o-$ : aor.-inf.  ${}^{\circ}\bar{u}-{}^{\circ}u\mu_{-}$  can be reconstructed with certainty, but comparative evidence pointing to a root athematic present is lacking:

**7.4.1.** Lith. *kr(i)áuti, kr(i)áuja, kr(i)óvė,* Latv. *kŗaũt (kraũt), kŗaũju, kŗãvu* (*ē*) "pile up" beside *krūtiês, krūjuôs, kruvuôs* and *kruĩtiês, krūjuos, kruvuos* 

<sup>&</sup>lt;sup>16</sup> The connection of TB *kwātär* with Ved. *hávate*, OCS *zъvati* has been challenged by Hackstein (2002, 192f.). See García Ramón 2010, 95ff. for arguments in favor of the traditional etymology.

"intrude" (← krūtiês, krujuôs, kruvuôs); Sl. \*krӳti, \*krӳjǫ AP a "cover, hide" (OCS kryti, kryjǫ, SCr. kriti, krijēm, Ru. kryt', króju, etc.).

PIE \*kreuH- (LIV, 371): OE hrēodan "cover" (uninformative).

**7.4.2.** Latv. *kļaût* "drink eagerly" beside *klùit*<sup>2</sup>, *kluju* "swallow, devour" (← \**klūt*, *kluju*); Sl. \**kl'ъváti*, \**kljűjǫ* AP a "peck" (SCr. *kljùvati*, *kljùjēm*, OCz. *klvati*, *klj'uju*, ORu. *klъvati*, *kljuju*, etc.).

The inner-Balto-Slavic etymology proposed here seems to me preferable to the traditional (and semantically problematic) connection of Sl. \**kl'ъvấti* with Lith. *kliáuti*(s) "stick to; rely on" and / or OCS *ključь* "key", Lat. *clāuis* "key, bar", Gk. κληῖς "bar, bolt", etc. (e.g. ĖSSJ 10, 82f.).

**7.4.3.** Lith. *br(i)áutis*, *br(i)áujasi*, *br(i)óvėsi* "push on, force one's way", rare tr. *br(i)áuti* "push".

PIE \**b*<sup>*h*</sup>*reuH*- "break" (LIV, 96): ON *brjóta*, OE *brēotan* "break" (uniformative). Nominal derivatives: Latv. *braũna* "scab, scurf", Ved. *bhrūņá*- n. "embryo", Cz. *brnka* "afterbirth, placenta" (cf. Mayrhofer EWAia 2, 283).

If Smoczyński (2003, 54) is right in taking Latv. *braũnât* "scrape, scratch" as an iterative to \**bṛaũt* (: Lith. *br(i)áuti*), its *Dehnton* and the presence of forms with and without palatalized anlaut point to \**briáu*- : \**brú*-.

**7.4.4.** Sl. \**po-l'ъvati*, \**-ljujq* "defecate" (ORu. *polevati*; cf. Reinhart 2003, 145ff.).

? PIE \**leu(H)-* "make dirty" (LIV, 414): Lat. *pol-luō*, *-ere* "make dirty" (uninformative). Nominal derivatives: Lat. *lutum* "mud, dirt", *lustrum* "pud-dle, marsh", OIr. *loth* "dirt" (< \**lutā*), Gk. λύθρον "clotted blood", λῦμα "dirt", etc.<sup>17</sup>

If Lith. dial. *liū́tinas* "dirty" (beside *liùtinas*), *liū́tynas* "id." belong here, they support the antiquity of the Slavic paradigm (the initial palatalization can only have been taken from full grade \*liau- < \*leuH-C-), but an inner-Lithuanian connection with *liū́tis* "heavy shower" (itself etymologically problematic) cannot be excluded.

<sup>&</sup>lt;sup>17</sup> Reinhart (2003, 150ff.) dismisses this etymology because the paradigm pres. °*juje*-, aor.-inf. °'*bva*- is otherwise only attested with *set*-roots, preferring instead a connection with \**leuH*- "untie" (Gk. λύω, Lat. *luō*, etc.; LIV, 417). In my view the facts do not allow for such a strong determinism as assumed by Reinhart (*anit*-roots in °*eu*- are poorly represented in Balto-Slavic). It is far from certain, in any case, that Lat. *pol-luō*, Gk. λύθ<sub>0</sub>ον, etc. must necessarily derive from an *anit*-root, as most of the evidence is actually ambiguous. Gk. λύθ<sub>0</sub>ον, Lat. *lustrum*, for instance, may go back to \**luH-(s)d<sup>h</sup>/ tro*- via "*Wetter*'s rule"; Lat. *lutum*, OIr. *loth* may go back to \**luH-tó/á*- via Dybo's law.

8. Aoristic roots.

**8.1.** Within our proposal the most salient feature of aoristic roots in Balto-Slavic would be an aorist-infinitive stem with full grade of the root. This is confirmed in the following cases:

**8.1.1.** Lith.  $a\tilde{u}ti$ ,  $a\tilde{u}na$ ,  $\tilde{a}v\dot{e}$ , Latv.  $\dot{a}ut$ ,  $\dot{a}unu / \dot{a}uju$ ,  $\dot{a}vu$  ( $\bar{e}$ ) / avu ( $\bar{a}$ ) "put on / take off (shoes)"; Sl. \*-*űti*, \*-*űjq* AP a "id." (OCS ob-/*iz*-uti, -ujq, SCr.  $\dot{o}buti$ ,  $\ddot{o}buj\bar{e}m$ ,  $\dot{z}uti$ ,  $\ddot{z}uj\bar{e}m$ , Cz. obouti, zuoti, etc.).

PIE aor.  $h_3eu-t$ , ?pres.  $h_3(e)u-ie/o-$  (LIV, 275):<sup>18</sup> Arm. *aganim*, *agaw* "put on (clothes)"); Lat. *ind-/ex-uō*, *-ere* "put on / take off (clothes)"; Um. pass. fut. imper. 2/3 sg. *anouihimu* "put on"; Hitt. *unu-<sup>mi</sup>* "adorn, decorate".

Arm. aor. *agaw* guarantees a PIE root aorist (the middle inflection is probably secondary, cf. *meīaw* "died" ~ Hitt. *merzi* "disappears", etc.). As for the PIE present stem, a *ie/o*-present is supported by Um. *anouihimu* (< ° $V_{u}$ -*ie/o*-, cf. García Castillero 2000, 262f.), Sl. *-uje*- and, perhaps, Lith. pret. *ãvė* (< \*au-*iiā*-?). *Pace* LIV (following Klingenschmitt 1982, 175ff.), a PIE nasal present \* $h_{2/3}u$ - $n(\acute{e})$ -H- is very doubtful. Arm. *aganim* may easily be innovated (cf. pres. *meīanim* "die" ~ PIE \*mr-*ié*-tor, etc.). In the case of Lith. *aũna*, Latv. *àunu*, it is true that the *na*-present is better established than it is normally the case for the type *bliáuti*, *bliáuja / bliáuna* (cf. Endzelin 1923, 578), but this does not automatically allow its projection into the parent language. The *na*-present can equally well be an early Baltic replacement of an inherited *ie/o*-present motivated by the inherently inchoative value of *aũti*.

For Balto-Slavic we can thus start from a paradigm pres. \*au-ie/o-, inf. \*au-tei-, aor. \*au-(s-)t, directly continued in Slavic. Baltic (Lith.  $a\tilde{u}ti$ , Latv. aut) and Slavic ( $*-\tilde{u}ti$ ) curiously contradict each other as far as the root intonation is concerned. The Slavic acute may have been extended from the *je*present  $*-\tilde{u}je-$ , itself maybe analogical to that of other presents in  $\circ\tilde{u}je-$  ( $*\check{c}\tilde{u}j\varrho$ ,  $*blj\tilde{u}j\varrho$ ,  $*plj\tilde{u}j\varrho$ , etc.).

**8.1.2.** Lith. *liáuti*, *liáuja*, *lióvė* "stop", Latv. *ļaũt*, *ļaũju*, *ļãvu* (ē) "allow"; OPr. *au-lāut* "die".

PIE \**leuH*- "loosen, untie" (LIV, 417):<sup>19</sup> Ved. *lunấti*, *lunoti* "cut" (Br.+); Gk. λύω "loosen", aor. mid. λύτο; Lat. *luō*, -*ere* "repent, pay", so-*luō*, -*ere* 

<sup>&</sup>lt;sup>18</sup> The reconstruction of this root as  ${}^*h_3eu$ - rather than  ${}^*h_2eu$ - (e.g. LIV) depends on Hitt. u-nu- $^{mi}$ , see Kloekhorst 2008, 919f., with references.

<sup>&</sup>lt;sup>19</sup> See Smoczyński 2003, 72ff.; 2005, 36 for this etymology, in my view clearly superior to LIV's reconstruction of a *u*-present \**leh*<sub>1</sub>-*u*- from the root \**leh*<sub>1</sub>- "leave" (LIV, 399).

"loosen"; Toch. *lu<sup>ā</sup>*- "send" (TB pres. III *lyewetär*, subj. V *lāwäm*, pret. I *lyuwa*; TA pres. VI *lun[āmäs]*, subj. V 1 sg. *lawam*, pret. I *lyu*).

OPr. inf. *aulāut* (for \**aul*'*aūt*) suggests that the full-grade infinitive of Lith. *liáuti*, Latv. *ļaũt* is old (contrast Latv. *maût* : OPr. \**mūt*, Sl. \**mỹti*). From Bl.-Sl. inf. \**leuH-téi-* one would expect Latv. \**ļaût*. The *Dehnton* of *ļaũt*, *ļaũju* can be explained in two ways: a) Balto-Slavic created a <u>ie</u>/o-present \**leuH-ie*/o- at an early date; b) Balto-Slavic inherited a Narten present \**léuH-* / \**léuH-* (cf. TB *lyewetär*). The second option (or, rather, a combination of both: Bl.-Sl. \**lēuH-ie*/o-) has the advantage of also accounting for "northern Indo-European" material like Gmc. \**lēwjan* "betray" (Go. *lewjan*, OE *lāwan*) or Sl. caus. \**lěviti* (Ukr. dial. *livyty* "slacken", Cz. *leviti* "facilitate; release").

**8.2.** The following verbs are good candidates for continuing a Balto-Slavic paradigm with full grade aorist-infinitive stem, but derivation from a PIE aoristic root is for one or another reason uncertain:

**8.2.1.** Lith. šáuti, šáuja, šóvė (dial. šãvo / šãvė), Latv. šaũt (saũt), šaũju, šãvu (ē) "shoot; shove"; Sl. \*sováti, \*sovájǫ "shove" (OCS sovati, sovajǫ, Slvn. suváti / sováti, súvem / sújem, OCz. suvati, suju, Ru. sováť, sujú).

Lith. dial. pret. šãvo requires a thematic present  $\frac{\dot{s}au-e}{o}$  in the prehistory of Baltic. The *Dehnton* and initial palatalization of Latv. šaũt (beside saũt) must thus stem from an inf.  $\frac{\dot{s}iau-tei}{a}$ . This implies a root  $\frac{\dot{k}eh_1u}{(inf. \frac{\dot{k}eh_1u-tei}{a})}$ , not  $\frac{\dot{k}euH}{a}$ , as traditionally assumed (e.g. LIV, 330). According to Vaillant 1966, 207, the Slavic present  $\frac{sovajq}{q}$  (OCS sovajq) has replaced an older thematic present  $\frac{sovq}{a}$ . If this is correct, the pre-Slavic paradigm  $\frac{sovati}{sovati}$ ,  $\frac{sove}{must}$  have been rebuilt on the present stem of Bl.-Sl. pres.  $\frac{\dot{s}au-e}{a}$ , inf.  $\frac{\dot{s}iau-tei}{a}$ , aor.  $\frac{\dot{s}iau(-s)-t}{a}$ . This Balto-Slavic family does not have a clear etymology.

**8.2.2.** Lith. *griáuti*, *griáuja*, *grióvė*, Latv. *graût*, *graûju*, *grâvu* (*ē*) "demolish".

PIE  $*g^h reh_1 u$ - or  $*g^h reuh_1$ - (LIV, 202):<sup>20</sup> Gk. aor. ἔχρα(<sub>F</sub>)ε "attacked"; χραύω "graze, scratch"; Lat. *in-gruō*, *-ere* "attack", *con-gruere* "unite".

<sup>&</sup>lt;sup>20</sup> The precise reconstruction of this root is problematic.  $*g^h reh_1 u$ - or  $*g^h reh_2 u$ -, supported by Gk. ζα-χρηής "furious", is difficult to reconcile with the aorist χρα<sub>F</sub>- ( $*g^h re-h_2 u$ - is in any case incompatible with the Baltic palatalized anlaut). Gk. ἔχρα(<sub>F</sub>)ε may be derived from  $*g^h r \mu H$ -, with analogical vocalization (e.g. Beekes 2010, 1645), or via an analogical super-zero-grade (e.g. LIV, with references).

The PIE present stem can not be reconstructed on the available evidence. Since this was an aoristic root, our hypothesis predicts Bl.-Sl. aor.-inf. \* $gri\bar{a}u$ -(< PIE aor. \* $g^{h}reuh_{1}$ -t or \* $g^{h}reh_{1}u$ -t). Without comparative support from Slavic this can of course not be proved.

**8.2.3.** Lith. gáuti, gáuna (gáuja), gãvo (góvė) "get", Latv. gaut, gauju/-nu, gavu (gāvu) "seize; get"; OPr. inf. -gaūt "get, obtain" (pres. -gaunai, 1 pl. -gaunimai).

The *na*-present is clearly old within Baltic (note, in addition to OPr. *-gau-nimai*, the widespread  $\bar{a}$ -preterit in Lithuanian and Latvian), though, *pace* LIV, 189, it need not be Indo-European in date. OPr. inf. *-gaūt* points to an inherited full grade aorist-infinitive stem. Latv.  $g\tilde{u}t$ ,  $g\bar{u}nu / g\tilde{u}stu / g\tilde{u}ju$ , guvu "obtain, get; seize" is probably a secondary inchoative to *gaut*, thus suggesting *Dehnton* \**gaũt* (the intonation of *gaut* is not recorded). The etymology of this Baltic family is unknown. We could mechanically posit the root as \* $g^{(w)(h)}eh_{2/3}(-)u$ -.

**8.2.4.** Sl. \**čűti*, \**čűjǫ* AP *a* "feel, notice" (OCS *čuti*, *čujǫ*, SCr. *čùti*, *čùjēm*, etc.).

PIE \*(s)keuh<sub>1</sub>- "perceive" (LIV, 561): Ved.  $\bar{a}$ -kuváte "intends" KS; Gk. κοέω "perceive, understand", Lat. *caueō*, -*ēre* "take care, beware" (< \*(s)koµh<sub>1</sub>- éįe/o-).

The isolated *tudáti*-present Ved.  $\bar{a}$ -kuváte does not suffice to establish whether  $*(s)keuh_1$ - was a present or an aoristic root. The full grade of OCS aor.  $\check{c}u$ , inf.  $\check{c}uti$  points to an inherited root aorist, but this is not absolutely certain. Vaillant (1966, 288f., 291), for instance, posits a zero grade past passive participle  $*\check{c}bvenb$  on the evidence of the verbal substantive CS u- $\check{c}bvenije$ , OSerb.  $\check{c}venije$  (for \*kbvenb, with secondary palatalization after the present). I am not certain, however, that  $*\check{c}bvenb$  necessarily demands an original paradigm pres.  $*\check{c}uje$ -, inf.-aor. \*ky- ( $\rightarrow *\check{c}y$ -). Cases of an (older?) zero-grade participle beside a full grade aorist are otherwise also attested, e.g. OCS ptcp.  $-\check{z}rbtb$ , Lith. adj.  $\hat{g}rtas$  "drank" to  $\check{z}r\check{e}ti$ ,  $\check{z}bre$ -, aor.  $\check{z}r\check{e}(tb)$  "swallow, devour", Lith.  $g\check{e}ria$ ,  $g\check{e}r\dot{e}$  "drink".

**8.2.5.** Sl. \**truti*, \**trovq* "feed" (OCS *na-truti*, *-trovq* "feed", ORu. *truti*, *trovu* "consume").

PIE \*treh<sub>1</sub>u- or \*treuH- (LIV, 647): GAv. aor.  $\theta$ raoštā, YAv. perf. tu $\theta$ ruiiē "feed"; OHG trouuen "grow" (see Reinhart 2003, 155<sup>38</sup> for this etymology).

GAv. aor.  $\theta$  raoštā mildly supports the reconstruction of an aoristic root (in oldest Indo-Iranian sigmatics aorists are rare beside root athematic presents,

cf. Narten 1964, 81). For (Balto-)Slavic we can postulate aor.-inf. *treh*<sub>1</sub>*u*- or \**treuH*- > \**triāu*-  $\rightarrow$  \**trāu*-, secondarily depalatalized after the present stem \**trau*-*e*/*o*-.

**8.2.6.** Sl. \*r(j)űti, \*rövq AP c "roar" (OCS r(j)uti, rovq / revq, Slvn. rjúti, rjóvem, OCz. řúti, řevu, etc.).

PIE \*h<sub>3</sub>reuH- "roar" (LIV, 306): Ved. pres. ruváti, intens. róravīti, aor. árāvīt, Av. athem. ptcp. uruuaņt- / uruuat- "roaring" (cf. Hill 2007, 214ff.); Gk. ἀφῦσμαι, aor. ἀφῦσάμην "howl".

The Indo-Iranian evidence is in principle compatible with both a present and an aoristic root. The Slavic paradigm is probably best derived from pres. \* $re\mu$ -e/o-, inf./aor. \* $r\underline{i}au$ - (< \* $h_3reuH$ -). Considering its meaning, however, the possibility cannot be discarded that Slavic has replaced a Balto-Slavic paradigm pres. \* $re\mu$ -e/o-, inf.-aor. \* $re\mu$ -e- vel sim. (see above footnote 7).

**9.** Finally, I give a list of verbs whose adscription to one of the two major groups is in my view impossible to determine:<sup>21</sup>

**9.1.** Lith. *niáuti*, *niáuja*, *nióvė* "steal". Probably related to In.-Ir. \**nav*-"move" (Ved. pres. *-nauti* Sū., caus. (-)*nāváyati* TB+; see Cheung 2007, 284 for Middle Iranian material), note the meaning of compounds like *i*-*si*-*niáuti* "break into", *už*-*niáuti* "put on" (LKŽ 8, 768).<sup>22</sup> Lith. *niáuti* is uninformative. The late attestation of the Indo-Iranian forms does not permit establishing the Indo-European averbo.

**9.2.** Sl. \* $d\tilde{u}ti$ , \* $d\tilde{u}jq$  AP *a* "blow" (Slvn.  $d\tilde{u}ti$ ,  $d\tilde{u}jem$ , Cz. douti, duji), \* $d\tilde{y}ti$ , \* $d\tilde{y}jq$  AP *a* "id." (Slvn.  $d\tilde{t}i$ ,  $d\tilde{i}jem$ ), cf. Koch 1990, 663ff. If from \* $d^h\mu eh_2$ -"produce smoke" (Gk.  $\theta \dot{\upsilon} \omega$  "sacrifice (by burning)", Lat. suf-fiō, -īre "fumi-gate", TAB  $tw\bar{a}s^{(\bar{a})}$ - "shine"; Ved.  $dh\bar{u}m\dot{a}$ -, Lat.  $f\bar{u}mus$ , etc.; LIV, 158), the State I of \*duti must be secondary to zero grade \* $d^huh_2$ -. It is unclear whether

<sup>&</sup>lt;sup>21</sup> Here naturally belong onomatopoeias like Lith. niáuti, niáuja, nióvė, Latv. ņaût<sup>2</sup>, ņauju, ņãvu (ē) "mew"; Latv. maût (màut, maût<sup>2</sup>), maûju, mâvu (ē) "bellow"; Latv. šķaût (šķaũt), šķaûju, šķãvu "sneeze"; Sl. \*ščbväti, \*ščűjǫ "course (with dogs)" (OCz. ščtváti, štije-, Pol. szczwać / szczuć, szczuje-, Slvn. ščúti, ščúje-); or Sl. \*výti, \*výjǫ "low, roar" (ORu. vyti, vyjǫ, Slvn. víti, Cz. výti, vyji, etc.).

<sup>&</sup>lt;sup>22</sup> The derivatives of PIE \**neu*(*H*)- "eine momentane Bewegung machen" have been carefully studied by García Ramón (1993). *Pace* García Ramón, on semantic grounds I prefer separating Lith. *niáuti* and In.-Ir. \**nav*- "move" from the family of Gk. νεύω "nod, beckon", Lat. -*nuō*, -*ere* "nod", MIr. *asnoí* "swear", *ad*·*noí* "entrust", Lith. *niaũsti*, *niaũsti*, *niaũsia* "bend (the head)".

we are dealing with a present or an aoristic root and Sl. \**dűti*, \**dýti* may be leveled both from pre-Slavic \**dyti*, \**duje*- and from \**duti*, \**dyje*- (*vel sim*.).

**9.3.** Latv.  $sk\tilde{u}t$ , skuvu (skuju), skuvu "shave". Obviously related to Lith skusti, skuta, Latv. skut, skutu "shave". A connection with Gk.  $\xi \dot{v} \omega$  "shave, smooth, scratch",  $\xi v \varrho \dot{v} v$ , Ved.  $k \dot{s} ur \dot{a}$ - "razor" seems also hard to deny (with metathesis \*kseu- > \*skeu- in Baltic?). If old, the prehistory of Latv.  $sk\tilde{u}t$  (apparently demanding \*skeuH-) remains obscure.

**9.4.** Lith. *kliáuti*(*s*), *kliáuja*(*si*), *klióvė*(*si*) "stick to; rely on", Latv. *kļaût*, *kļaûju*, *kļâvu* ( $\bar{e}$ ) "lean (tr.)", *kļaûtiês* "lean on". The traditional connection with Gk. Hom.  $\varkappa\lambda\eta$ īç, Dor.  $\varkappa\lambda\alpha$ īç "bar, bolt", Lat. *clāuis* "key, bar" (PIE \**kle*- $h_2u$ -) is compromised by the initial palatalization of *kliáuti*(*s*). If it is accepted (note Slavic material like OCS *ključb* "key", SCr. *kljũka* "hook", RuCS *ključiti* "lock", also with initial palatalization and semantically much closer to  $\varkappa\lambda\eta$ īç / *clāuis*), the few verbal derivatives of \**kleh*<sub>2</sub>*u*- (Lat. *claudō*, *-ere* "close, lock", perhaps Gmc. \**sleutan* "close": OHG *sliozan* etc.) do not help establishing the Indo-European averbo. The same holds true if one prefers a connection of Baltic (and eventually Slavic) with Gmc. \**hleutan* "cast lots" (OE *hléotan*, OHG (*h*)*liozan*; ON *hljóta* "get as one's lot"; cf. Stang 1972, 29). Within Baltic the *Dehnton* of the anticausative Latv. *kļũt* "reach; become" (beside *kļût*) suggests that the *Brechton* of *klaût*(*iês*) is secondary.

**9.5.** Latv. *skaût*, *skaûju*, *skâvu* ( $\bar{e}$ ) / *skavu* ( $\bar{a}$ ) "embrace". Etymologically unclear. The preterit *skavu* points to a thematic present \**skava*.

**9.6.** Latv. spraûtiês, spraûjuôs, sprâvuôs "rise". Probably related to Lith. spráusti, spráudžia "squeeze, thrust", Latv. spraûst, spraûžu "push in", Gmc. spreutan / sprūtan "sprout" (OE sprēotan, OFr. sprūta, etc.), cf. Fraenkel LEW, 879, Vine (1981, 110ff.). The prehistory of Latv. spraûtiês remains unclear.

10. The preceding discussion has followed two main methodological guidelines. First, the conviction that historical study of Baltic and Slavic must necessarily pass through a common Balto-Slavic stage. Second, that the development from Proto-Indo-European to Proto-Balto-Slavic displayed a greater degree of regularity than it is usually supposed.

The hypothesis developed in this article is, I believe, generally confirmed by the data. A large group of verbs certainly showed root ablaut  $\circ \bar{a}\mu - (\underline{i})e/o$ -(<  $\circ euH$ -,  $\circ eHu$ -) :  $\circ \bar{u}$ -/ $\circ u\mu$ - (<  $\circ uH$ -), in most cases clearly associated to a Balto-Slavic opposition between present stem and aorist-infinitive stem and often derived from PIE "present roots" (§ 7.1, 7.3). Verbs with a full-grade aorist-infinitive stem demonstrably derived from PIE "aoristic roots", on the other hand, are surprisingly few (§ 8.1). This fact alone could seriously compromise the whole approach, but as a matter of fact present roots largely outnumber aoristic roots in the type of verbs we are studying. Why this is so is unclear. One can speculate that many roots in  $^{\circ}euH$ - or  $^{\circ}eHu$ - go back, in the last instance, to fossilized (pre-)PIE *u*-presents, but this is just a possibility. It remains only to briefly discuss the development of the Proto-Balto-Slavic system in Baltic and Slavic.<sup>23</sup>

The development in Baltic has already been sketched above (§ 4). Following the general restructuring of the Baltic preterit system, the  $\bar{a}$ -preterit must have adopted the vocalism of the present at an early date: aor.  $*kuu-\bar{a}- \rightarrow$ \*kau-ā- (Lith. dial. kāvo) after pres. \*kau-e/o- (OCS kove-). In the case of inherited ie/o-presents this gave rise to a new length-grade  $\bar{e}$ -preterit: aor. \* $blu u - \bar{a} \rightarrow bl' \bar{a} u - \bar{a} \rightarrow bl' \bar{a} u - i \bar{a} - \gamma bl' \bar{a} u - i \bar{a} - \gamma bl' \bar{a} u - \bar{e}$ - (Lith. blióvė) after pres. \*bliáu-ie/o- (Lith. bliáuja, OCS bljuje-). The infinitive stem, on the other hand, seems to have retained its original ablaut grade (usually zero) for a longer time, cf. OPr. aumūsnan (: Latv. maût) vs. aulāut (: Lith. liáuti). At some point (perhaps only in East Baltic) it was adapted to the root vocalism of the present stem as well. This fact, together with the spread of the preterit type \*bl'a $\bar{u}$ -e-, was probably related to the generalization of ia-presents in oāuia- as the only present stem of this class (as a rule, ie/o-presents do not tolerate e: Ø ablaut in Baltic). Unfortunately, the scarcity of Prussian data does not permit determining whether this was a Common Baltic tendency or an exclusively East Baltic development.

<sup>&</sup>lt;sup>23</sup> Our proposal immediately raises a number of questions in an Indo-European perspective. Since I cannot devote the necessary space to discuss any of them in this article (mainly concerned with ablaut patterns), I just give a list of some particularly urgent problems that will need to be addressed in the future: i) the origin of the Balto-Slavic " $\bar{a}$ -aorist", which at present bears the appearance of a *deus ex machina*, is still obscure; ii) was the " $\bar{a}$ -aorist" the only type of aorist to "present roots" or were other types also possible (e.g. sigmatic aorists)? If so, what was their distribution?; iii) similarly, can any rationale be found for the development of PIE root athematic presents into either simple thematic presents or full-grade *ie/o*-presents (an uncommon type in Indo-European)?; iv) finally, the whole rebuilding of the present stem of "aoristic roots" also remains to be worked out in detail.

While the patterns of evolution in Baltic are reasonably clear, the development in Slavic seems to have been less linear and faces us with problems that cannot be properly discussed here. In general terms Slavic has certainly preserved the Balto-Slavic ablaut alternations better than Baltic, but a number of important innovations also took place. Unlike in Baltic, in Slavic the vocalism of the present has often been adapted to that of the aorist-infinitive stem, as clearly seen in the type OCS kryti, kryjo (for pres.  $\dagger kr i \tilde{a} - ie/o$ , cf. Lith. kriáuja, Latv. kraũju). Probably the most important problem concerns the evolution of the aorist-infinitive stem of present roots. Although zero grade is usually preserved (with few exceptions like *kovati*, *kovo*,  $\S$  7.3.2), the putative Balto-Slavic system inf. \*krū-tei-, \*blū-tei- : aor. \*kruu-ā-, \*bluu-āseems to have developed in two different ways: it either gave rise to a second stem in \*-ā- (e.g. OCS bl'bvati, bljujo; zbvati, zovo), or to an innovated "root" aorist (e.g. OCS kryxb, 2/3 sg. kry to inf. kryti). While the first development is, I believe, essentially uncontroversial, the idea that aorists like OCS 2/3 sg. kry, -my, -ny, -ry are entirely new coinages may strike as surprising. This possibility, however, is in my view implied by the fact that the Slavic aorist is synchronically dependent on the root structure and accentual class of the verb (cf. Dybo 1981, 213, 217f.). Thus, just as a perfectly well-formed sigmatic aorist like OCS těxv, teče (tešti, teko "run, flow") cannot be old (no sigmatic aorists from the fairly widespread root  $*tek^{w}$ - are otherwise attested), I see no particular reason why kry, -my etc. cannot be recent as well. Needless to say, the general restructuring of the Slavic aorist (which remains one of the major tasks of Slavic historical grammar) stands beyond the scope of this article.

## LIE. bliáuti, bliáuja, LA. bļaût, bļaûju VEIKSMAŽODŽIŲ TIPO KILMĖ IŠ BALTŲ-SLAVŲ PROKALBĖS PERSPEKTYVOS

## Santrauka

Ankstesniame straipsnyje autorius yra kėlęs darbinę hipotezę, kad ide. (tranzityviniai-) aktyviniai prezensai ir aoristai vystėsi baltų-slavų prokalbėje tokiu būdu: i) ide. prezensai iš "prezenso šaknų" įgijo naują nulinio laipsnio bendraties ir aoristo (ko gero,  $\bar{a}$ -aoristas) kamieną, ii) ide. šakniniai aoristai iš "aoristo šaknų" buvo tęsiami kaip pamatinio laipsnio bendraties ir aoristo kamienai (žr. Villanueva Svensson 2011, 317tt.).

Šiame straipsnyje tikrinama, ar ši hipotezė tinka baltų ir slavų kalbų pirminiams veiksmažodžiams iš ide. šaknų, kurios baigiasi \*°eu-, \*°eHu-, \*°euH-. Rytų baltų kalbose įsitvirtino reguliarus tipas lie. bliáuti, bliáuja / bliáuna, blióvė, la. bļaût, bļaûju / bļaûnu, bļâvu, tačiau lietuvių ir latvių kalbose pasitaiko nemažai faktų, liudijančių ganėtinai sudėtingesnę priešistorę (pvz., lie. briáutis šalia bráutis, la. raût šalia pļaūt, lie. trm. būt. l. šāvo ir kt.). Slavų prokalbėje šių šaknų veiksmažodžiai vystėsi įvairiau negu (rytų) baltų kalbose, su kuriomis dažnai nesutampa (pvz., lie. bliáuti, bliáuja ~ sl. \*bľ vaťti, \*bljűjǫ, la. maût, maûju ~ sl. \*mýti, \*mýjǫ, plg. pr. aumūsnan). Straipsnyje analizuojami visi baltų ir slavų prokalbėje. Rezultatai iš esmės patvirtina keliamą hipotezę.

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