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LITH. risti, rita "ROLL", OCS -rěsti, -ręštǫ "FIND" AND THE PIE ROOT *ret- IN BALTO-SLAVIC

Abstract. Lith. *risti*, *rita* "roll" (Latv. *rist*, *ritu*), *riẽsti*, *riẽčia* "bend" (la. *riest*, *riešu*) and Sl. *-*rếsti*, *-*rết*^{*} "find" derive from the PIE root **ret*- "roll" (cf. OIr. *rethid* "runs"; Lith. *rãtas*, OHG *rad*, Lat. *rota* etc. "wheel"). We can reconstruct a PIE Narten present **rết*^{*}-*ti*/**rét*-*nti* that in Balto-Slavic was thematized into **rēt*-*e*/*o*- and acquired a zero-grade aorist-infinitive stem **rt*- > **irt*- \rightarrow **rit*- (with metathesis on analogy with pres. **rēt*-). The complex rebuilding of the present stem in Sl. **rē*-*n*-*t*-(*i*)*e*/*o*- depended on the semantic development "roll" > "run" > "find". In Baltic the unusual ablaut pattern **rēt*-*e*/*o*- : **rit*- was rebuilt as regular **reit-e*/*o*- : **rit*-. At a later stage of the development of the Baltic verb it split into the two primary verbs **risti*, **rita* and **reisti*, **reitja*.

Keywords: Baltic; Slavic; Indo-European; historical morphology; verb; ablaut.

1. To stress the importance of etymology in the research of Professor $S \mod cz y \inf sk i$ is almost redundant considering the fact that he has authorized an etymological dictionary of Lithuanian himself (2007). Among the guidelines one can discern in Smoczyński's approach to etymology I would highlight the following ones, if only because they stand in sharp contrast with much of the traditional work in this area (including Fraenkel's dictionary): almost systematic avoidance of root-enlargements, general preference for inner-Baltic accounts, regular comparison with Slavic, full attention to ablaut (which actually provides the ordering principle of Smoczyński's dictionary), as well as to the creation of Baltic neo-roots. In this modest contribution I will try to exemplify the potential of these principles for research on Baltic etymology and morphology.

In the late thirties André Vaillant (1939, 25) proposed that OCS *-rěsti*, *-ręšto*, *-rětv* "find" continues the primary verb of the root **ret-* (OIr. *rethid* "run"), which is well known as the source of one of the Indo-European words

for "wheel" (Lith. $r\tilde{a}tas$, Lat. rota, etc.). Following a traditional etymology that is no longer generally favored he further included Lith. risti, rita "roll", $ri\tilde{e}sti$, $ri\tilde{e}\tilde{c}ia$ "curve, bend" in the set. Vaillant's etymology never acquired a broad acceptance and the details have to my knowledge never been worked out in detail. In this article I will try to show that it is indeed correct and that, in addition, it has a considerable interest for the reconstruction of the Balto-Slavic verbal system and its development in Slavic and, especially, Baltic. Before presenting my scenario (§ 6–11), I will discuss the data and alternative accounts of Lith. risti, $ri\tilde{e}sti$ (§ 2–3) and OCS $-r\check{e}sti$ (§ 4–5).

2. The Baltic material clusters around two independent primary verbs:

2.1. Lith. *rìsti*, *rìta* (dial. *reñta*), *rìto* (dial. *rìtė*) "roll (tr./intr.)", Latv. *rist*, *ritu*, *ritu* "id.".

The Eastern Aukštaitian \bar{e} -preterit $rit\dot{e}$ is a well-known innovation affecting zero-grade thematic presents. Considering its isolation, the very rare present *reñta* must be an occasional analogy on the model of the type *kristi*, *kreñta* "fall". We can thus safely reconstruct a Baltic paradigm **risti*, **rita*, **ritā*. In both Lithuanian and Latvian, the basic meaning is "to roll", used both transitively and intransitively. In the latter case we often find the reflexive Lith. *ristis*, Latv. *ristiês*. Other meanings presented in LKŽ 11, 684ff. ("run", "wrestle [refl.]", etc.) are easily understood secondary developments.

Most derivatives are essentially unremarkable: iter. *ritéti/rytéti*, *-a/-éja* "roll (usually intr.)", *rietéti*, *riẽta* "roll (intr.)", caus. *rìtinti*, *-ina* "roll (tr.)", *riténti*, *-ēna* "id.". Some nominals: *rìtinis/ritìnis*, *ritinỹs* "roll, scroll; cylinder", *ritulỹs* "roll; ball", Latv. *ritulis* "id.", *ritenis* "wheel". Of more potential interest are the following two groups of derivatives:

- i) neo-root *ris*-, mostly associated with the swiftness of horses: *rìstas* "fast (horse)", *risčià* "trot", *rìstė*, *rìstis* "id.", *risnóti*, -*ója* "trot", *risčióti* "id.".¹ See below for some Slavic *comparanda* (§ 4);
- ii) *rut-* in *rùtulas*, *rutulỹs* "ball, sphere, globe", whence adj. *rùtuliškas* "ball-shaped", denom. *rùtulioti*, *-oja* "roll up", *rùntinti/ruñtinti*, *-ina* "roll; wrestle"; Latv. *rutulis* "ein rundes Stück Holz Wessen, ein Balkenende, ein runder Klotz" (ME 3, 565). Smoczyński (2003,

¹ I prefer assuming a neo-root *ris*- < **rit*-*t*° (as per Vaillant 1966, 185; Smoczyński 2007, 517) over a semantically problematic connection with Gmc. **rīsanq* "rise, get up" (Go. -*reisan*, OE *rīsan* etc.; e.g. Fraenkel, 738; Vasmer 2, 524).

89²¹²; 2007, 517) assumes an alternative zero grade rut- < *rt- beside the more widespread rit-. In my view we are probably dealing with an occasional assimilation $*ritu^{\circ} > *rutu^{\circ}$ (cf. $ritul\tilde{y}s$, with essentially the same meaning) that developed into a modest word-family of its own.²

2.2. Lith. *riẽsti*, *riẽčia* (*riẽta*), *riẽtė* "curve, bend; warp (tr.)", Latv. *riest* (*riezt*), *rìešu/riežu*, *rìetu/rìedu* "ear, bud; shed (tears); warp; sieve; spread (tr./intr.)".

These verbs present us with a more complicated picture than Lith. *risti/*Latv. *rist*. The Latvian variants *ries-*, *riez-* are well-paralleled innovations, whereas *ried-* is almost certainly due to contamination with the family of Lith. *riedéti* "roll", cf. ME 3, 547. The Lithuanian dialectal present *riẽta* is poorly represented in the LKŽ 11, 562ff., mostly in Northern Žemaitian. I am thus inclined to assume that it represents an occasional innovation rather than an archaism. The basic meaning of Lith. *riẽsti*, *riẽčia* is "to bend (tr.)" (with many secondary and contextual meanings), the intransitive being regularly expressed with the reflexive *riẽstis* except in the meaning "to grow, branch". The semantics of Latv. *riest*, *riešu* is essentially compatible with that of Lith. *riẽsti*, *riẽčia*, with the difference that it can be both transitive and intransitive.

Derivatives of Lith. *riẽsti*/Latv. *rìest* are essentially irrelevant for etymological purposes: iter. *raitýti*, *raīto* "bend"; *riẽstas* "curved", *riẽtena* "whitlow; knotweed", *reĩtkus* "kind of weaver's comb", and some others.

2.3. The original identity of Lith. *risti*/Latv. *rist* and Lith. *riẽsti*/Latv. *riest* has never been in doubt, most authors assuming that both verbs arose through paradigm split from earlier pres. **reit-a-* : pret. **rit-ā-* (e.g. Endzelin 1923, 671; Stang 1942, 114; LIV, 700). This is reasonable enough and will not be challenged in what follows. As for the semantics of the Baltic root **reit-*, I believe it is most naturally glossed as simply "to roll (intr.)", from which "bend", "warp", "run", "ear", etc. are easily understood secondary developments. The transitivity of the primary verbs in Lithuanian and Latvian ([almost] exclusive only in Lith. *riẽsti*, *riẽčia*) is also easily understood as secondary, perhaps through polarization vis-à-vis the redundant addition of the reflexive marker to the original intransitive verb.

 $^{^2}$ In view of the close semantic agreement of Lith. *rutulỹs*, Latv. *rutulis* with other derivatives of *rìsti* it seems ill-advised to look for alternative, extra-Baltic etymologic connections (e.g. Fraenkel, 753).

The picture is further complicated by the synonymous and rhyming family of Lith. *riedéti*, *riẽda* "roll (intr.)" (*ridéti*, *rìda* "id.", caus. *ridénti*, *-ẽna* "roll (tr.)", etc.), with which it was partly contaminated.³ Thus, for instance, it is conceivable that derivatives like Lith. *ritéti*, *rietéti* or *riténti* reflect a contamination of both roots rather than being straight derivatives of *rìsti* (as tacitly assumed above). Be that as it may, the existence of *riedéti*, *riẽda* does not seem to have any bearing on the question to which we now turn: the etymology of Lith. *rìsti*/Latv. *rist* and Lith. *riẽsti*/Latv. *rìest*.

- 3. We can distinguish two main etymologies:
- i) from the root **ret* of Lith. *rãtas*, Lat. *rota*, etc. "wheel". This etymology was popular in the past, but has been generally disfavored in more recent literature. Since it is the one I will argue for in this article, I postpone discussion until § 6;
- ii) Lith. *rìsti*, *rìta* and *riẽsti*, *riẽčia* are to be directly equated with Gmc.
 **wrīþaną* "twist" (ON *ríða* "turn, ring, tie", OE *wrīðan* "twist, writhe", OHG *rīdan* "wind, turn"). First proposed by Lidén (1899, 4), this is the etymology favored in most reference works (e.g. LIV, 700) and by now it can be confidently qualified as standard.⁴

Reasonable as it may seem at first sight, the connection Lith. $risti \sim$ Gmc. *wripanq is not without problems. As already noted by Stang (1972, 45), Lidén's law (PIE *urE-> Bl.-Sl. *rE-) is supported by the absence of initial $\dagger vr$ - in Baltic and Slavic, but none of the examples is probative beyond reasonable doubt. The semantic fit is not perfect. Since Baltic clearly points to an original meaning "to roll (intr.)", one has to assume a complex semantic development "to roll" > "to bend" > "to twist" in Germanic. This is not unconceivable (the notions "to turn", "to wind", "to roll" strongly intermingle in the languages, cf. Buck 1949, 664ff.), but not particularly attractive either. Finally, the putative root *ureit- would be limited to Baltic and Germanic alone. This is not by itself a serious objection, but once one

³ Lith. *riedéti* is usually related to Gmc. **rīdanq* "ride, drive" (ON *ríða*, OE *rīdan*, OHG *rītan*), OIr. *réidid* "ride" (e.g. IEW, 861; LIV, 502), which is far from obvious from a semantic point of view. See Fraenkel, 687f.; Smoczyński 2007, 514, 517, for other, by no means better suggestions.

⁴ E.g. ME 3, 532; Fraenkel, 731; Kroonen 2013, 597; Derksen 2015, 381, among others. Authors like Seebold (1970, 568), Stang (1972, 45) or Smoczyński (2003, 89²¹²; 2007, 515, 517) give it only hesitantly.

includes OCS *-rěsti*, *-ręštǫ* "find" and some other Balto-Slavic material in the set (see below) I believe an etymology joining Baltic and Slavic under a well-established PIE root is to be given preference over an exclusive Balto-Germanic comparison.

None of these objections is conclusive, but the confidence with which this etymology has been met in the literature seems to me somewhat undeserved.

4. Slavic *-rěsti, *-rę́t(j)q, *-rę́t(j)etb AP a, aor. *-rě́tb, *-rě́te "find": OCS ob-, sb-rěsti, -ręštq, SCr. srešti, srèt(n)ēm, (dial.) obresti se, Slvn. dial. ob-résti, -rétem, s-résti, Ru. ob-restí, -retú/-rjášču.

I refer to Vaillant 1966, 183ff. for more information on the reflexes of *-résti in the Slavic languages. The few derivatives of Sl. *-résti are unremarkable and need not be detailed here (OCS -rétati, -ajǫ [impf.], obrétenije "finding", etc.). The most interesting case is OCS ristati, rištǫ, ORu. ristati, rišču "run", OPol rześcią "at a trot" (< *rьstьjǫ), which evidently recalls the family of Lith. risčià (§ 2.1). See below § 10.

The paradigm of OCS -*rěsti*, -*ręštq*, -*rětv* is unique. Leaving the *je*-present aside, it is evidently on a par with OCS *sěsti*, *sędq*, *sědv* "sit down", *lešti*, *lęgq*, *legv* "lie down" and must thus continue the original morphology of the Balto-Slavic anticausative-inchoative class of verbs. We will return to these issues below (§ 10), after examining the etymology of OCS -*rěsti*, -*ręštq*.

5. Unlike the case of Lith. *risti/riẽsti* one cannot speak of a standard etymology of OCS *-rěsti*, *-ręštq*. Leaving aside Vaillant's derivation from **ret*- (which has always occupied a marginal position among the preferred accounts of OCS *-rěsti*, *-ręštq*), most authors have embraced one of the three following proposals (cf. ĖSSJ 29, 75f.):

- i) with Gk. εὑϱίσκω, aor. εὖϱον "find", OIr. pret. ·fúar, pass. ·fríth (suppletive pres. fogabim "find") (PIE *ureh₁-, LIV, 698),⁵ as first proposed by Brugmann (1912, 379ff.);
- ii) with Lith. *ràsti, rañda*, Latv. *rast, rùodu* "find", an idea that was already popular in the 19th century;
- iii) with Lith. su-rēsti, pret. sù-rėčiau "seize", as proposed by Bezzenberger (1901, 168).

These etymologies are not necessarily regarded as mutually exclusive. Several authors combine i) and ii) (e.g. Klingenschmitt 1978, 6f.), ii) and

⁵ The often quoted Arm. *gerem* "drive, carry" does not belong here, cf. Praust 2005.

iii) (e.g. Vasmer 2, 244), or even i), ii) and iii) (e.g. Snoj 2003, 691). It must also be observed that they are frequently given with some hesitation, no doubt reflecting the fact that they are all problematic.

To begin with the material that is most easily dismissed, Lith. *su-rešti*, su-rešti, su-rešti, u are only known from Bezzenberger himself (1882, 163), who heard them in the village of Priekulė near Klaipeda. There is no reason to doubt Bezzenberger's testimony, but material of such an isolated dialectal status is more likely to reflect an idiosyncratic neologism than a strong archaism. Leskien *apud* Brugmann 1912, 381¹ plausibly suggests that we are dealing with *su-riesti* "curl up, bend" (misheard by Bezzenberger?) "und eine ähnliche Übertragung verliegt wie in unserm volkstümlichen Ausdruck *einen (ordentlich) einwickeln = betrügen*". Be that as it may, Bezzenberger's *su-rešti* cannot be used.

Derivation from *ureh1- is only possible if one takes the further step to assume a root-enlargement $*ureh_1$ -t- only for Slavic. If Lith. ràsti, rañda is included in the picture, one is forced to assume a parallel root-enlargement **ureh*₁- $d^{(h)}$ - for Baltic as well.⁶ Although this is to some degree a matter of taste. I fully share Smoczyński's reluctance to operate with root enlargements, as it entails using a device that we cannot control. Leaving this methodological issue aside, I would like to add just a couple of observations. First, it suffices to take a look at Buck's material s. v. "find" (Buck 1949, 765f.) to observe how easily this notion is lexically renewed. Although the root $*ureh_1$ - is surely the best candidate for being the Indo-European verb "to find", this doesn't a priori force us to believe that OCS -rěsti, Lith. ràsti must be derived from *ureh₁- through ad hoc root enlargements. Second, the morphology of Sl. *- $r\check{e}sti$, *- $r\acute{e}t(j)o$, *- $r\check{e}tb$ is in my view not directly clarified by this etymology. The issue has hardly ever been addressed by proponents of this etymology. The only exception known to me is Klingenschmitt (1978, 6f.; 2008, 188f.), who tentatively reconstructs pres. *rant- < $*ura_1$ -n-t- : aor. *ret-< **ureh*₁-*t*-, with generalization of the vocalism of the aorist.⁷ Klingenschmitt's

⁶ Most Balticists relate Lith. *ràsti, rañda* to OCS *rodъ* "race", *roditi*, Latv. *radît* "give birth" (e.g. Fraenkel, 701; Smoczyński 2007, 500).

⁷ I'm not sure whether this is relevant in this perspective, but it is perhaps interesting to note that the root **ureh*₁- almost certainly did not build a present in the parent language: OIr. pret. *·fúar* is part of a suppletive paradigm, Gk. εύοίσχω is evidently late and still very rare in Homer.

reconstruction entails a well-known Indo-European pattern (active-transitive) root aorist : nasal present of the type $k^w r\acute{e}ih_2-t$: $k^w ri-n\acute{e}-h_2-ti$ "buy". This paradigm type is very rarely preserved in Germanic and Balto-Slavic (e.g. ORu. *kriti*, *krъnju* "buy"), where we find instead a productive class of derived anticausative-inchoative thematic nasal presents.⁸ It is within this "Northern Indo-European" class that the morphology of Sl. $*-r\acute{e}sti$, $*-r\acute{e}t(j)q$ should be accounted for, not as relics of well-formed Indo-European paradigms. This fact almost automatically implies two things: i) we are dealing with a Balto-Slavic anticausative-inchoative verb, ii) the transitive meaning "to find" must be somehow secondary.

In brief, any attempt to establish a connection between OCS *-rěsti*, *-ręštǫ* and either Gk. εύǫίσκω or Lith. *ràsti* is unlikely to provide firm results. It is thus understandable that this verb is frequently regarded as a *locus desperatus* of Slavic etymology.

6. The results achieved so far can be summarized as follows. The traditional inner-Baltic identification of Lith. *risti*, *rita* "roll" and *riẽsti*, *riẽčia* "bend" is most probably correct, the original meaning being "to roll (intr.)". The now standard etymology entails an exclusive comparison with Gmc. **wrīþaną* "twist", which is conceivable, but not unobjectionable. OCS *-rěsti*, *-ręštǫ* "find" lacks a satisfactory etymology altogether. We can now return to our point of departure: Vaillant's derivation of OCS *-rěsti* and Lith. *risti*, *riẽsti* from PIE **ret*-.

As already observed (§ 3), the idea that Lith. *risti*, *riẽsti* are primary verbs to be compared with OIr. *rethid* "run" was quite widespread up to the first decades of the 20th century.⁹ Curiously, most authors quoted only Lith. *risti*, *rìta* "roll", but not *riẽsti*, *riẽčia* "bend". In this way they avoided the most obvious problem that this etymology encounters (the Baltic root was **reit*-!), and F r a e n k e l's main argument to dismiss it (731). Nor was the morphology of *rìsti*, *rìta* (and *riẽsti*, *riẽčia*!) usually discussed. Bl. *rit*- evidently implies something like **rt*- > **irt*- → *rit*-, which in turn has two further implications: i) there must have been a robust full grade **ret*- in the paradigm in order to motivate the metathesis **irt*- → *rit*-, ii) at a still earlier stage there must have

⁸ See Gorbachov 2007 for a full-scale study. My own views are presented in Villanueva Svensson 2011a.

⁹ E.g. Walde-Pokorny 2, 368; LEIA, R-23; IEW, 866. References to older literature in Lidén 1899, 4.

been a place in the paradigm where the zero grade *rt- was firmly established. As for Lith. *riēsti*, *riēčia*, it evidently requires a secondary ablaut *rit- $\rightarrow *reit$ within Baltic. But *riēsti*, *riēčia* is a primary verb, not a secondary derivative of *rìsti*, *rìta*. There must thus have been a powerful reason in Baltic to build a secondary full grade *reit- to a zero grade *rit-. I will return to these issues below. For the moment it will be enough to observe that they have not been properly addressed in the literature.

Matters became more complicated – and interesting – when Vaillant (1939, 25; 1966, 184f.) included OCS –*rěsti*, –*ręštq* in the set. As already observed, it never acquired a broad acceptance. It was accepted by Stang (1942, 54), Mikkola (1950, 84f.) and, more recently, Blažek (2009, 46f.). In Villanueva Svensson (2011b, 23, 30; 2012–2013, 51f.; accepted by Jasanoff 2012, 129) I took up Vaillant's etymology and argued that **ret*-made a Narten present **rét***-ti/***rét-nti* in the parent language. This is the source of the long vowel of Sl. *–*résti*, *–*réft(j)q*. At that time I had not yet come to appreciate the importance of the Baltic material, which makes it necessary to tackle the whole issue anew.

7. The PIE root $*ret^{-10}$ is well known as the source of one of the PIE words for "wheel" *rót-o-, coll. *rot- eh_2 - (Lith. $r\tilde{a}tas$, OHG rad, OIr. roth, Lat. rota, Ved. $r\acute{a}tha$ -). With a couple of exceptions (on which see infra), the material given in NIL, 575ff. are either transparent derivatives of the noun for "wheel; chariot" or inner-Celtic derivatives of the primary verb OIr. rethid "run". The meaning of this root is given either as "to run" or as "to roll". The choice of "to run" is borne out by two arguments: i) this is the meaning of the verb in Celtic, the only branch that has preserved the PIE primary verb with certainty; ii) words for "wheel" typically derive either from verbs meaning "to run" (e.g. $Gk. \tau \varrho \acute{e} \chi \omega$ "run" $\rightarrow \tau \varrho \varrho \chi \acute{e} s$ or from verbs meaning "to turn" vel sim. (e.g. $*k^w elh_1$ - "turn" $\rightarrow *k^w e-k^w l[h_1]$ -o-). The second argument is probably false. As shown by Leto u blon and de Lamberterie (1980), the original meaning of the root $*d^h re\hat{g}^h$ - was "turn", still preserved in $\tau \varrho \acute{e} \chi \omega$ in

¹⁰ Beside **ret*- one often finds the notations **Hret*- and **reth*₂- (**ret*^h- in the older literature). The reasons for positing **Hret*- are unclear to me (perhaps because some authors believe that Indo-European did not possess initial **r*-?). Ved. *rath*°, Av. *raθ*° are usually explained through a derivational channel coll. **rot*-*eh*₂- \rightarrow **rot*-*h*₂-*o*- and do not require **reth*₂-.

Homer. In general terms, it seems that words for "wheel" very rarely derive from verbs meaning "to run". On the other hand, verbs meaning "to turn", "to roll" very easily develop a secondary meaning "to run" *vel sim*. (as in Gk. $\tau \varrho \epsilon \chi \omega$ itself), a fact that deprives OIr. *rethid* "run" of any probative force.

Leaving the Balto-Slavic evidence aside, an original meaning "to roll" is virtually proved by the fourth branch in which the primary verb is (indirectly) attested. Lat. *rotundus* "round" (Vulgar Latin *retundus*, the form continued in the Romance languages) is universally considered a fossilized gerundive, which by necessity implies a Proto-Italic primary verb **reto*. The root vocalism of Lat. *rotundus* was taken from *rota* "wheel", it being unclear whether Vulgar Latin *retundus* is an archaism vis-à-vis the classical form or a secondary dissimilation *rotundus* > *retundus*, as usually assumed. The point to stress here is that the meaning "round" of *rotundus* makes little sense if **reto* meant "to run", but is unremarkable if it meant "to roll".

As argued in Villanueva Svensson 2011b, 23, 30; 2012–2013, 51f., there are good reasons to believe that **ret*- was a "Narten root". The best evidence comes from Balto–Slavic. In addition to the lengthened grade of Sl. *-*resti* (which can hardly be explained in any other way), Latv. *ruõta* "adornment; toy" (< **rốt-eh*₂-), *ruõtât*, *-ãju* "turn, hop" (< **rōt-eh*₂-*ie/o*-) are best interpreted as an archaic collective of the type **kốm-eh*₂- (Gk. κώμη "village; district"),¹¹ and an equally old denominative of the type **nōm-eh*₂-*ie-ti* (Gk. νωμάω "handle, wield"), cf. Villanueva Svensson 2012–2013. Sl. *-*resti*, Latv. *ruõta*, *ruõtât* thus continue an archaic derivational channel **rét**-*ti*/**rét*-*n*ti → **rốt-eh*₂- → **rōteh*₂-*ie-ti* entirely parallel to **léĝ*-*ti*/**léĝ*-*n*ti (Lat. *lēgī*, Alb. *mb-lodhi*, TA impf. *lyāk* "saw" < impf. **léĝ*-*t*; cf. Jasan off 1998, 306f.) → **lốg*-*eh*₂- (Gk. λώγη· καλάμη, καὶ συναγωγὴ σίτου Hsch.) → **lōĝ*-*eh*₂-*ie-ti* (Gk. ἐλώγη· ἕλεγεν Hsch., OE *lōcian* "look").

The picture that emerges from Balto-Slavic is partially confirmed by Celtic. OIr. *rethid* "run", pre-Lat. **reto* "roll" < **rét-e/o-* are unremarkable regularizations from PIE **rét^s-ti/***rét-nti*, but OIr. pret. *ráith* (< perf. **(re-) rót-e*?), fut. *ress-* (< desid. **rĕt-s-*?) continue formations that probably belonged to "Narten roots", cf. Jasanoff 2003, 31, 135¹⁸. In addition, OIr. *ráithe* "quarter (of year)", *sam-rad* "summer(time)", *gaim-red* "winter(time)",

¹¹ The type $k \delta m - eh_2$ - was established by Vine (1998). Katz *apud* Vine 1998, 697⁴⁴ and Villanueva Svensson 2012–2013, 50ff. present evidence indicating that it belonged to the "Narten derivational system".

MW gaeafrawd "id." < PCelt. * $r\bar{a}to$ - < PIE * $r\bar{o}t$ -o- may be directly equated with Latv. $ru\tilde{o}ta$.

8. It is thus reasonable to assume that Balto-Slavic inherited a Narten present $*r\acute{e}t^s$ - $ti/*r\acute{e}t$ - ηti meaning "to roll" (in addition to some other contextual meanings). The position of the Narten presents in the (pre-) PIE verbal system is still disputed. Descriptively, they appear in one of the following environments:

- i) the Narten present is the only primary verbal formation we can reconstruct, e.g. $*h_1\acute{e}s-/*h_1\acute{e}s-$ "sit", $*sm\acute{e}i-/*sm\acute{e}i-$ "smile", etc. As per Jasanoff 1998, a number of familiar thematic presents like $*b^h\acute{e}r-e/o-$ "carry", $*l\acute{e}g-e/o-$ "gather" probably go back to (pre-)PIE Narten presents of this profile;
- ii) beside root aorists, e.g. aor. * $d\hat{e}\hat{k}$ -t (Gk. ἕδεπτο "received") → pres. * $d\hat{e}\hat{k}$ -/* $d\hat{e}\hat{k}$ - (Ved. $d\hat{a}$ sti "worships"); see Kümmel 1998 for a dossier;
- iii) beside molō-presents, e.g. *sókH-/*sékH- (Hitt. šākk-/šekk-^{bḥi} "know") ~ *sékH-/*sékH- (OCS sěšti, sěkǫ "cut").

Group iii) is predictably rare, but combined with group ii) (not that common either) it suggests that Narten presents were a derived verbal formation in origin. It is probable that Narten presents were also derived from "normal" root athematic presents (${}^{*}h_{1}\acute{es}-/{}^{*}h_{1}\acute{s}-$ " "be" ~ ${}^{*}h_{1}\acute{es}-/{}^{*}h_{1}\acute{es}-$ " "ist" may be a case in point), but this is almost impossible to prove from the available data. By the break-up of the parent language most Narten presents we can reconstruct belong to group i) and are often associated with an archaic derivational system of their own (Schindler's "Narten roots").

ret*- looks like an almost paradigmatic example of this type. As such, it most probably lacked an aorist altogether. Whether OIr. pret. *ráith* continues an archaic perfect **(re-)rốt-e* remains at present uncertain. For Balto-Slavic, in any case, this has no importance, as the PIE perfect did not play any role in the restructuring of its preterit system. In brief, our starting point is just a Narten present **rét*-ti/***rét-nti* "roll".

9. The question that now arises is what would happen to such a formation at an early stage of Balto-Slavic. I believe we can safely postulate two processes:

- i) the present stem was thematized and generalized one of both root vocalisms;
- ii) it acquired a zero-grade aorist and infinitive stem, probably aor. **rt-ā-*, inf. **rt^s-tĕi* (*vel sim*.).

The first step PIE $*r\acute{e}t^s-ti/*r\acute{e}t-nti \rightarrow Bl.-Sl. *ret-e/o-$ is unremarkable, as this is what usually happened to inherited Narten presents in most languages. The early chronology I am assuming can be questioned, but this is not of prime importance for present purposes. The second step requires more elaboration.

In a number of publications starting from Villanueva Svensson 2011c I have argued that Indo-European presents from "present roots" (presents, so to speak, that did not inherit an aorist beside them) typically acquired a zero grade aorist-infinitive stem, almost certainly involving an "ā-aorist" of still uncertain origin. The resulting pattern is still preserved in the historical languages, e.g. OCS gunati, ženo "chase, persecute", Lith. giñti, gena "drive, chase" (PIE *g^{wh}en-ti/*g^{wh}n-enti "beat, kill"), Lith. výti, vēja "chase, hunt" (PIE *uéih1-ti/*uih1-énti), OCS bbrati, bero "gather, take" (PIE **b^hér-e-ti*), *bl' bvati*, *bljujo* "spit, vomit" (PIE **bléuH-ti/***bluH-énti*), etc. The pattern is better represented in Slavic than in Baltic (contrast Lith. berti, -ia "strew, scatter", bliáuti, -ja "bleat"). For the most part, however, Balto-Slavic paradigms of the type pres. *gen-e- : inf. *gun-tei, aor. *gun-a- have to be reconstructed on different types of indirect evidence: divergent root vocalisms in Baltic and Slavic (e.g. Lith. gr(i)áužti, -ia "gnaw" vs. Sl. *grűzti, *grŷzo "id." \leftarrow Bl.-Sl. *grēuź- : *grūź-), independent primary verbs from the same root (e.g. Lith. kálti, kãla "forge", kùlti, kùlia "thresh, beat" ← Bl.-Sl. *kol-e- : *kul- < PIE *k δ lH-e(i)/*k ℓ lH-rs), derivatives demanding an unattested root vocalism (e.g. Lith. caus. vimdyti "make vomit" to vémti, vēmia "vomit", pointing to earlier *vimti, vēmia), fossilized participles (e.g. Lith. *mìltai* "flour" < **m*[*h*₂-*to*- to *málti*, *mãla* "grind"), etc.

To be sure, it is not always certain that we are dealing with an original paradigm of the type *gen-e- : *gun-těi, *gun-ā- and not, say, with the inverse ablaut pattern of the type OCS čisti, čbtǫ "count, read; honor" or with secondary elaborations of one or another sort. To give an example, the contrast between Lith. nérti, nẽria "dive" and Latv. nìrt²/niît/niĩt, nirstu/niru (< niŗu) "id." may be mechanically solved as Bl. *ner-(i)a : *nir-tẽi, *nir-ā-, but this is compromised by Sl. *nertí, *nъrǫ "submerge" (CS -nrěti, -nьrǫ, Ukr. nérty, nru), which rather suggests a paradigm *nir-(i)a : *ner-tẽi, *ner-ā-for the prehistory of Baltic. But this is once again uncertain: a) it is not a matter of fact that the ablaut pattern of Sl. *nerti, *nъrǫ must be projected into Balto-Slavic, as this is the default paradigm for Slavic *e*-presents; b) even

if this is correct, a complex inner-Baltic development Bl.-Sl. **nir-e/o-* : **ner-* \rightarrow Bl. **ner-(i)a* : **ner-(i)a* : **nir-* cannot be excluded; c) in the end, Latvian could have borrowed its vocalism from the derived inchoative (cf. Lith. *nìrti*, *nỹra/nìrsta*).

Viewed against this framework inherited Narten and *molo*-presents that generalized root vocalism $*-\bar{e}-$ or *-o- become a particularly probative group, in spite of the limited number of certain examples, because in this case we can be certain of two things: a) no aorist was inherited from PIE in most cases, b) the zero grade can only have originated in the aorist-infinitive stem. I refer to Villanueva Svensson 2011c, 312ff. for a study of the *molo*-presents. As for the Narten presents, the following present clear traces of ablaut:¹²

Lith. *čiáupti/čiaũpti*, -*ia* "compress one's lips; press together; seize" ~ Lith. $t\tilde{u}pti$, tupia "perch" < (pre-)Bl. pres. * $t\bar{e}up-(i)e/o-$: inf.-aor. *tup- < PIE * $t\bar{e}up-ti/*teup-nti$;

Lith. $d\acute{e}lbti$, -ia "lower one's eyes; beat" ~ Sl. * $d\imath$ lbsti (* $d\acute{e}lbsti$), * $d\acute{e}lbq$ "hollow, chisel" (RuCS $dl\imath$ bsti, $dl\imath$ be-, SCr. $d\acute{u}psti$, $d\acute{u}b\bar{e}m$, Čak. dlisti) < Bl.-Sl. pres. * $d\bar{e}lb$ -e/o- : inf.-aor *dilb- (< * d^hlb^h -) < PIE * $d^h\acute{e}lb^h$ -ti/* $d^h\acute{e}lb^h$ -nti;

Lith. *ieškóti*, *íeškau* (OLith. *ieszku*) "look for, search" ~ Sl. **jbskấti*, **jbskq*, "id." (OCS *iskati*, *iskq/ištq*) < Bl.-Sl. pres. * $\bar{e}isko/e$ - : inf./aor. **isk*- or **iskā*- < * $h_2 \dot{e}is\hat{k}e/o$ - (cf. Jasanoff 2003, 192);

Sl. *smbjáti, *smějo se "laugh" (OCS smijati, smějo se), Latv. smiêt(iês), smeju(ôs), "id." < Bl.-Sl. pres. *smēj-e/o- : inf.-aor. *smi- < PIE *smēi-ti/*sméj-nti.

No ablaut is (predictably) attested in other candidates like Lith. *glébti/glébti, -ia* "embrace", *grésti, gréndžia* "scrape, scratch", OCS *čajati, čajq* "expect, wait", or *sěšti, sěkq* "cut", but the examples mentioned above suffice to indicate that Narten presents, like other presents from "present roots", typically acquired a zero-grade aorist-infinitive stem.

It is thus reasonable to assume that PIE $*r\acute{e}t^s-ti/*r\acute{e}t-nti$ "roll" would be reflected as pres. $*r\acute{e}t-e/o-$: inf. $*rt^s-t\check{e}i$, aor. *rt-a- (vel sim.) in early Balto-Slavic. The development from this starting point is easy to understand. Whereas the present $*r\acute{e}t-e/o-$ simply stayed as such, the aorist-infinitive stem *rt- gave *irt- by regular sound change and was then metathesized to

¹² Most of the evidence presented here is taken from Villanueva Svensson 2011b, 21ff.; 2014, 242ff., to which I refer for a more elaborated treatment of the data.

**rit*- after the present stem **r* $\bar{e}t$ -, with a morphological zero grade in the right position of the root. The resulting paradigm pres. **r* $\bar{e}t$ -*e*/*o*- : inf. **ris*-*t* $\bar{e}i$, aor. **rit*- \bar{a} - (*vel sim.*) was thus parallel to pres. **t* $\bar{e}up$ -(\underline{i})*e*/*o*-, **d* $\bar{e}lb$ -*e*/*o*- : inf.-aor. **tup*-, **dilb*- and some other cases. The point to stress is that zero grade in the aorist-infinitive stem must have been regular enough to make a somewhat unusual paradigm **r* $\bar{e}t$ -*e*/*o*- : **rit*- fully acceptable. It was probably preserved untouched until the end of Balto-Slavic unity. Our next task will be to see how it evolved in the separate branches.

10. The development leading to Sl. *-*rěsti*, *-*rę́t(j)q*, *-*rě́tv* "find" is complex, but not essentially problematic. From a semantic point of view "to roll", "to turn" may easily develop into "to run" (OIr. *rethid*, Gk. $\tau q \epsilon \chi \omega$, etc.). Lith. *rìsti*, *rìta* "roll" presents secondary meanings like "run", "travel", "go", "move" that could, in principle, be quite old. If, as seems likely, Lith. *rìstas* "fast (horse)", *risčià* "trot", OCS *ristati*, *rište*- "run", OPol *rześcią* "at a trot" belong here, we would have factual proof indicating that "to run" was a secondary meaning of **rēt-e/o-* : **rit*- already in Balto-Slavic. It was the one inherited by Slavic, where a secondary semantic development "go, run" > "find" took place. This, again, is typologically unremarkable, cf. Lat. *in-venīre*, *oc-currere*, Ru. *na-jti*, ORu. *ob-iti*, Lith. dial. *su-eĩti*, *su-bégti*, etc. As these examples show, "go, run" > "find" is usually associated to usage with preverbs ("run into", etc.), just as in Sl. **ob-*, **sv-rěsti*.

As for the morphology of Sl. *- $r\check{e}sti$, *- $r\check{e}t(j)q$, *- $r\check{e}tb$, we have already seen that it is that of the Balto-Slavic anticausative-inchoative class of verbs (Lith. pa-busti, $-bu\widetilde{n}da$, -budo "wake up"). In Slavic, where the type was renewed as vbz-bb(d)nqti, -bb(d)nq, -bbdb "wake up" (see Gorbachov 2007, 47ff. for the details), the original morphology was only preserved in a handful of verbs like OCS $s\check{e}sti$, sedq, $s\check{e}dv$ "sit down" as well as in some verbs that extended the nasal infix through the whole paradigm (e.g. OCS $-se\check{s}ti$, -segq "reach for, touch", cf. Lith. $s\check{e}gti$, $s\check{e}ga$ "fasten, button"). In the case of *- $r\check{e}sti$, *- $r\check{e}t(j)q$ it seems that * $r\bar{e}t-e/o-$: *rit- first generalized the present stem * $r\bar{e}t$ -through the whole paradigm (pre-Sl. * $r\bar{e}t-e/o-$: * $r\bar{e}s-ti$, aor. * $r\bar{e}t-\bar{a}-$, vel sim.) and then joined the anticausative-inchoative class when it acquired semantics akin to this type of verbs (yielding almost attested * $r\bar{e}-n-t-e/o-$: * $r\bar{e}s-ti$, aor. * $r\bar{e}t-e/o-$; the process is well known, cf. OCS $le\check{z}e-$ "lies down" \rightarrow Pol. legnie-, OLith. $g\check{e}ma$ "is born" \rightarrow Lith. gimsta, etc.). The thematic aorist *- $r\check{e}tv$ was an automatic consequence of this semantically motivated change of class. As for

the *je*-present of OCS *-ręštǫ*, it remains unclear to me whether the *e*-present that we find in some languages (RuCS *ob-retú* beside *-rjášču*, Slvn. *ob-rę́te*beside dial. *-rę́nče*-) is an archaism vis-à-vis the *je*-present or a secondary regularization parallel to the *ne*-present of Cz. *střetnouti*, SCr. dial. *srětnēm*, Bulg. *sréštne*- (this seems to be the position of Vaillant 1966, 183f.). The paradigm Sl. **-rę̃sti*, **-rę̃tjǫ*, **-rę̃tъ* is unique, a fact that speaks in favor of its relative antiquity within Slavic. I see two options: either the present **-rēnte*was remade as **-rēntje*- when it acquired the meaning "to find" (the *je*present being a way of marking transitivity), or we are dealing with an old *ie/o*-inchoative **rē*-*t*-*ie/o*- : **rēs*-*ti* : **rēt*-*e/o*- whose present was recharacterized as **rē*-*n*-*t*-*ie/o*- (the nasal infix being the productive inchoative marker).¹³ No solution is clearly better than the other and I prefer to leave this question open.

Needless to say, one can envisage other scenarios. The main alternative would be to assume that $r\bar{e}sti$, $r\bar{e}nte/o$ - (or $r\bar{e}tie/o$ -) was an early inchoative of the primary verb, not its direct continuant. The rest of the story would be the same. I find this less likely, as it involves a somewhat unwarranted extra step, but the point to stress is that the anticausative-inchoative character of rresti, rresti

11. In the case of Lith. *risti*, *rita* "roll" and *riesti*, *riečia* "bend", scholars defending a connection with OIr. *rethid* and/or OCS *-rěsti*, *-ręštǫ* have assumed that the full grade **reit-* of *riesti* was secondarily built to the zero grade **rit-*.¹⁴ There is of course no other choice. The question is now: which features of the Baltic verbal system triggered the creation of a new full grade **reit-* beside inherited zero grade **rit-?* In a sense, the answer is easy: the ablaut pattern Bl.-Sl. pres. **ret-e/o-* : aor.-inf. **rit-* was quite rare, whereas **ei : *i* was normal and common. But this only partly answers the question. If a paradigm **ret-e/o- : *rit-* was aberrant enough as to be eliminated, why wasn't it simply solved through generalization of one of the root vocalisms?

There are two ways to approach the creation of *riẽsti*, *riẽčia*. To begin with the one I consider unlikely, one could assume that Lith. *riẽsti*/Latv. *riest*

¹³ See Villanueva Svensson 2011a, 48ff., with references, for the residual class of anticausative-inchoative *ie/o*-presents of the northern Indo-European languages.

¹⁴ E.g. Vaillant 1939, 25; 1966, 185; Mikkola 1950, 85; Smoczyński 2007, 515.

is not, historically, a primary verb, but a derivative of Lith. *risti*/Latv. *rist* (which under this approach would have generalized the zero grade at an early date). The lexical composition of the Baltic *ia*-presents is fairly complex (see Villanueva Svensson 2014, 227 for a brief survey), one of its sources being iteratives, causatives and denominatives in *-*eie*/o-, e.g. Lith. *taĩti*, -*ia* "pronounce" \leftarrow OLith. *tarýti*, -*ia* (< iter. **tor-éie*/o-), *baũsti*, *baũdžia* "punish" < caus. **b*^houd^h-éie/o- "make observe" (contrast OCS *bljusti*, *bljudq*, Ved. *bódhati* "observe" < **b*^héud^h-*e*/o-), švę̃sti, šveñčia "celebrate" \leftarrow šveñtas "holy". One could thus speculate that Lith. *riẽsti*/Latv. *riest* continue Proto-Baltic **raitīti*, **rait(i)ja* (*vel sim.*), a derivative of **risti*, **rita* that developed into a neo-primary verb. But there is nothing iterative or causative in Lith. *riẽsti*, Latv. *riest*. In addition, primary *ia*-presents for which such an origin can be postulated are by no means common, and the items one can seriously consider are lexically isolated and thus relatively old (Lith. *taĩti*, *baũsti*). In brief, it seems unlikely that Lith. *riẽsti* is a derivative of *risti*.

The second approach would begin by accepting the traditional view that Lith. *risti*/Latv. *rist* and Lith. *riēsti*/Latv. *riest* arose through paradigm split from an earlier paradigm **ris-ti*, **reit-a*, **rit-ā*. The wide range of secondary meanings that can evolve from "to roll" (including "to bend") makes the notion of paradigm split entirely unproblematic. But this doesn't answer the question we posited above. In order to understand a process like **rēt-e*/*o*- : **rit-* \rightarrow **reit-e*/*o*- : **rit-* (or even **rit-e*/*o*- : **rit-* \rightarrow **reit-e*/*o*- : **rit-*) it is necessary to take a closer look at the development of the ablaut patterns of the Balto-Slavic primary *-e*/*o*- and *-<u>i</u>e/<i>o*-presents in Baltic.

Descriptively, Slavic primary *-e-* and *je*-presents from roots that could ablaut¹⁵ typically present one of the following two ablaut patterns:

- i) zero grade in the present vs. *e*-grade in the aorist-infinitive stem, e.g. OCS čisti, čbtǫ "count, read", -strěti, -stbrǫ "stretch", -liti, -lijǫ "pour" (< *lbjǫ, cf. Koch 1990, 388ff.). This is the normal paradigm for *e*-presents, OCS *mrěti, mbrǫ* (Zo. *u-mbr̂etъ* 4x!) being the only example of a *je*-present that was anyway replaced by an *e*-present (cf. Koch 1990, 443ff., with references);
- ii) e-grade in the present vs. zero grade in the aorist-infinitive, e.g. OCS dvxati, dušo "breathe, blow", lbzati, ližo "lick", stolati, steljo "spread",

¹⁵ With this qualification I am excluding $^{\circ}eC$ - and $^{\circ}eH$ -roots, in which ablaut involving zero grade of the root would be avoided.

 $\check{z}bdati$, $\check{z}idq$ "wait", etc. This is the normal ablaut pattern for verbs with second stem in *-a*-.

Needles to say, ablaut invariance is well-attested in historical Slavic, but comparison with Baltic and other types of indirect evidence show that ablaut was much more widespread in prehistory. The Indo-European origins of the Balto-Slavic ablaut patterns need not concern us here, except to observe that the ablaut patterns i) and ii) seem to be linked to PIE aorist and present roots, respectively. The strong association in Slavic of ablaut pattern i) with *e*-presents and ablaut pattern ii) with *je*-presents is almost certainly secondary (note that the latter is regularly associated to *a*-presents in Baltic), but neither the Balto-Slavic system nor its development in Slavic can be discussed in detail here. Turning now to Baltic, we find the following picture:

- i) the ablaut pattern čisti, čuto has been eliminated, Lith. imiti, ima, *eme* "take" (: OCS jęti, imo < *jumo "id.") being the only relic (see Villanueva Svensson 2013, 234ff.);
- ii) the ablaut pattern *lbzati*, *ližq* is well attested among *a*-presents. It is the normal paradigm for °ERT-roots (Lith. *piřkti*, *peřka* "buy", etc.), and is found among other root-structures as well (e.g. Lith. *giñti*, *gēna* "chase, drive", Latv. šķist, šķietu "think, seem");
- iii) e : zero ablaut is excluded from *ia*-presents, where depending on root-structure we either have no ablaut at all (Lith. *piēšti, piēšia, piēšė* "draw") or a lengthened grade *ē*-preterit (*sver̃ti, svēria, svē̃re* "weigh", *lēkti, lēkia, lēkė* "fly, run").

The ablaut pattern of the *ia*-presents is an inner-Baltic innovation that almost certainly originated in the \bar{e} -preterit via accent retraction from $*-i \underline{i} \bar{a}$ $> *-\tilde{e}$ (see Villanueva Svensson 2014, 241f., with references). It had the unfortunate effect to eliminate any direct evidence of inherited ablaut in this extremely numerous class. Indirect evidence is of course available (e.g. Lith. *skélti*, *skělia* "cleave, split" ~ *skilti*, *skilia* "strike fire"), but since the general trend was to replace *a*-presents with *ia*-presents one can hardly ever be certain that we are dealing with prehistoric ablaut of the *ia*-presents and not of the *a*-presents. As for the *a*-presents, my claim is that the ablaut pattern *lbzati*, *ližq* not only survived in Baltic, but was considerably extended at an early date. There are several facts pointing in this direction. Thus, in a number of cases the ablaut pattern of Baltic is exactly the opposite to that of Slavic, e.g. Sl. **čerpti*, **čbrpq* "scoop, draw", **čersti*, **čbrtq* "carve, slash", **čisti*,

*čbto "count, read; honor", *mélzti, *mblzo "milk" vs. Lith. kirpti, kerpa "cut, clip", kiřsti, keřta "slash, hew", Latv. škist, škietu "think, seem", Lith. dial. mìlžti, mélža "milk". Although on occasion Slavic may have innovated, this cannot be true for all examples. Similarly, the fossilized participle Lith. girtas "drunk" and, especially, the causative girdyti, -o "give to drink" indicate that Lith. gérti, géria, Latv. dzert, dzeru "drink" continue Bl. *gir-těi, *ger-(i) a, in contrast with Sl. *žerti, *žbro "swallow, devour". These cases put the above mentioned Lith. nérti, něria/Latv. niřt, niru "dive" ~ Sl. *nerti, *nbro "submerge" (as well as Lith. spirti, spiria/Latv. spert, speru "kick" ~ Sl. *perti, *pbro "lean, push" or Lith. siaupti, -ia "wrap, surround"/supti, -a "rock, cradle" ~ Sl. *supti, *spo "pour, strew") in its proper light. Although one would naturally be prone to project the Slavic paradigm into Proto-Baltic, a Baltic paradigm *nir-tei, *ner-(i)a, *nir-a- is more in accordance with the facts of this branch. To give a more extreme example, the \bar{e} -preterit of some intransitive verbs like Lith. miñti, mēna, mìnė "remember, recall", gimti/gimti, gema/gimsta, gime "be born" is quite unexpected in Baltic, where \bar{e} -preterits are strongly linked to transitivity. Since the \bar{e} -preterit originated beside *ia*-presents, it is most natural to reconstruct Proto-Baltic *ia*-presents *min-ia (: Ved. mányate "think", Gk. μαίνομαι "rage"), *gim-ia (: Gk. βαίνω, Lat. *uenio* "went") from which pret. **min-ijā* > **min-ē̃* was derived. Since *ia*presents were productively transitive in Baltic, *min-ia, *gim-ia were doomed to disappear. The fact that they were replaced by **men-a*, **gem-a* only makes sense if pres. e : inf.-pret. zero was felt as the unmarked ablaut pattern for primary verbs susceptible of ablaut.

The list of potential examples could easily be extended, but what has been said suffices to establish the point. The motivation for the dramatic restructuring of the Proto-Baltic verbal ablaut cannot be discussed within the limits of this article. It may have been, in part, a consequence of the generalization of the \bar{a} -preterit in this branch of the family, as this formation regularly triggered zero-grade in Balto-Slavic. Turning back to Lith. *risti*/Latv. *rist*, Lith. *riësti*/Latv. *riest*, the development of Baltic should now be reasonably clear. Examples like Lith. *kálti*, *kãla* ~ *kùlti*, *kùlia*, *čiáupti*/*čiaũpti*, *-ia* ~ Lith. *tũpti*, *tùpia* suggest that Baltic inherited some verbs with *o : zero, * \bar{e} : zero ablaut, but these ablaut patterns are never directly attested in the historical Baltic languages. The reason can only be that they were uncommon and were felt as somewhat aberrant. A case like * $r\bar{e}t$ -e/o- : *rit-

**reit-e/o-* : **rit-* (but even **rēt-e/o-* : **rit-* \rightarrow **rit-e/o-* : **rit-* \rightarrow **reit-e/o-* : **rit-* cannot be categorically excluded) is now easy to understand. It was not just a matter of an irregular ablaut pattern being replaced by a regular one. The resulting **risti,* **rieta,* **ritā* joined what must have been the regular and productive ablaut pattern of primary verbs at an early stage of development of the Baltic verb. At a later stage (probably after the creation of the *ē*-preterit and the elimination of *e* : zero ablaut among *ia*-presents) ablaut tended to be eliminated among *a*-presents as well (many of them being transferred to the dominant class of the *ia*-presents). The conditions were thus rife for paradigm split to occur and Bl. **risti,* **rieta,* **ritā* gave rise to the historically attested Lith. *risti, rita* "roll" and *riẽsti, riẽčia* "bend".

LIE. risti, rita, S. SL. -rěsti, -ręštǫ "RASTI" IR IDE. ŠAKNIS *ret-BALTŲ-SLAVŲ KALBOSE

Santrauka

Lie. rìsti, rìta (la. rist, ritu), riễsti, riễčia (la. rìest, rìešu) ir sl. *-rếsti, *-rết(j)q, *-rếtb "rasti" kildinami iš ide. šaknies *ret- "risti" (plg. s. air. rethid "bėga"; lie. rãtas, s. v. a. rad, lo. rota ir kt. "ratas"). Ide. prokalbei galima rekonstruoti Narten prezensą *rḗt^s-ti/*rét-nti, kuris baltų-slavų prokalbėje buvo tematizuotas į *rēt-e/o- ir įgijo nulinio laipsnio aoristo-bendraties kamieną *rt- > *irt- → *rit- (su metateze pagal prez. *rēt-). Sudėtingas morfologinis perdirbimas į prez. *rē-n-t-(į)e/o- slavų prokalbėje neįprasta ablauto paradigma *rēt-e/o- : *rit- buvo perdirbta į dėsningą *reit-e/o- : *rit-, kuri vėlyvesnėje baltų veiksmažodžio raidos stadijoje skilo į du pirminius veiksmažodžius *risti, *rita ir *reisti, *reitja.

REFERENCES

Bezzenberger, Adalbert 1882, Litauische Forschungen, Göttingen: Peppmüller.

Bezzenberger, Adalbert 1901, Etymologien, *Beiträge zur Kunde der indogermanischen Sprachen* 26, 166–168.

Blažek, Václav 2009, Kam ta slova zmizela? O chybějících slovanských kontinuantech indoevropských etymonů, *Studia Etymologica Brunensia* 6, 37–57.

Brugmann, Karl 1912, Wortgeschichtliche Miszellen, Indogermanische Forschungen 30, 371–382.

Buck, Carl Darling 1949, A dictionary of selected synonims in the srincipal Indo-European languages, Chicago: University of Chicago Press.

Derksen, Rick 2015, *Etymological dictionary of the Baltic inherited lexicon*, Leiden, Boston: Brill.

Endzelin, Jānis 1923, Lettische Grammatik, Heidelberg: Winter.

ĖSSJ – Oleg Nikolaevič Trubačev (ed.), *Ėtimologičeskij slovar' slavjanskix jazykov*, Moskva: Nauka, 1974–.

Fraenkel – Ernst Fraenkel, *Litauisches etymologisches Wörterbuch* 1–2, Göttingen, Vandenhoeck & Ruprecht; Heidelberg: Winter, 1962–1965.

Gorbachov, Yaroslav 2007, Indo-European origins of the nasal inchoative class in Germanic, Baltic and Slavic, Cambridge (MA): Harvard Dissertation.

IEW – Julius Pokorny, *Indogermanisches etymologisches Wörterbuch*, Bern, München: Francke, 1959.

Jasanoff, Jay H. 1998, The thematic conjugation revisited, in Jay Jasanoff, H. Craig Melchert, Lisi Olivier (eds.), *Mír Curad: Studies in Honor of Calvert Watkins*, Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, 301–316.

Jasanoff, Jay H. 2003, *Hittite and the Indo-European verb*. Oxford: Oxford University Press.

Jasanoff, Jay H. 2012, Long-vowel preterites in Indo-European, in H. Craig Melchert (ed.), *The Indo-European verb. Proceedings of the Conference of the Society for Indo-European Studies, Los Angeles 13–15 September 2010*, Wiesbaden: Reichert, 127–135.

Klingenschmitt, Gert 1978, Zum Ablaut des indogermanischen Kausativs, Zeitschrift für vergleichende Sprachforschung 92, 1–13.

Klingenschmitt, Gert 2008, Erbe und Neuerung bei Akzent und Ablaut in der litauischen Morphologie, in Danguolė Mikulėnienė, Saulius Ambrazas (eds.), *Kalbos istorijos ir dialektologijos problemos* 2, Vilnius: Lietuvių kalbos institutas, 180–215.

Koch, Christoph 1990, Das morphologische System des altkirchenslavischen Verbums 1–2, München: Fink.

Kroonen, Guus 2013, *Etymological dictionary of Proto-Germanic*, Leiden, Boston: Brill.

Kümmel, Martin Joachim 1998, Wurzelpräsens neben Wurzelaorist im Indogermanischen, *Historische Sprachforschung* 118, 191–208.

LEIA – Joseph Vendryes, Édouard Bachellery, Pierre-Yves Lambert, *Lexique éty-mologique de l'irlandais ancien*, Dublin: Institute for Advanced Studies, Paris: CNRS, 1959–.

Letoublon, Françoise, Charles de Lamberterie 1980, La roue tourne, *Revue de philo*logie, de littérature et d'histoire anciennes 54, 305–326.

Lidén, Evald 1899, Ein baltisch-slavisches Anlautgesetz, Göteborg: Wettergren & Kerber.

LIV – Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstammbildungen, unter Leitung von Helmut Rix und der Mitarbeit vieler anderer bearbeitet von Martin Kümmel, Thomas Zehnder, Reiner Lipp, Brigitte Schirmer. Zweite, erweiterte und verbesserte Auflage bearbeitet von Martin Kümmel und Helmut Rix, Wiesbaden: Reichert, 2001.

LKŽ – Lietuvių kalbos žodynas 1–20, Vilnius: Mintis; Mokslas, 1941–2002.

ME – Karl Mühlenbach, Jānis Endzelīns, *Latviešu valodas vārdnīca. Lettisch-deutsches Wörterbuch* 1–4, Rīga: Izglītības ministrija, Kultūras fonds, 1923–1932.

Mikkola, Jooseppi Julius 1950, Urslavische Grammatik. Einführung in das vergleichende Studium der slavischen Sprachen, 3. Teil: Formenlehre, Heidelberg: Carl Winter's Universitätsverlag.

NIL – Dagmar S. Wodtko, Britta Irslinger, Carolin Schneider, Nomina im Indogermanischen Lexikon, Heidelberg: Winter, 2008.

Praust, Karl 2005, Bedeutung und Vorgeschichte von armenisch gerem (mit einem Exkurs zu griechisch αἰχμαλωτεύω, αἰχμαλωτίζω), Sprache 45, 134–159.

Seebold, Elmar 1970, Vergleichendes und etymologisches Wörterbuch der germanischen starken Verben, The Hague, Paris: Mouton.

Smoczyński, Wojciech 2003, *Hiat laryngalny w językach bałto-słowiańskich*, Cracow: Wydawnictwo Uniwersytetu Jagiellońskiego.

Smoczyński, Wojciech 2007, *Słownik etymologiczny języka litewskiego*, Vilnius: Vilniaus universiteto leidykla.

Snoj, Marko 2003, Slovenski Etimološki slovar, Ljubljana: Modrijan.

Stang, Christian S. 1942, Das slavische und baltische Verbum, Oslo: Dybwad.

Stang, Christian S. 1972, *Lexikalische Sonderüberstimmungen zwischen dem Slavischen, Baltischen und Germanischen*, Oslo, Bergen, Tromsø: Universitetsforlaget.

Vaillant, André 1939, L'imparfait slave et les preterits en $-\bar{e}$ - et en $-\bar{a}$ -, Bulletin de la Société de Linguistique de Paris 40, 5–30.

Vaillant, André 1966, *Grammaire comparée des langues slaves 3: Le verbe*, Paris: Klincksieck.

Vasmer – Max Vasmer, Russisches etymologisches Wörterbuch 1–3, Heidelberg: Winter, 1953–1958.

Villanueva Svensson, Miguel 2011a, Anticausative-inchoative verbs in the northern Indo-European languages, *Historische Sprachforschung* 124, 33–58.

Villanueva Svensson, Miguel 2011b, Indo-European long vowels in Balto-Slavic, *Baltistica* 46, 5–38.

Villanueva Svensson, Miguel 2011c, The accentuation of the infinitive type Latv. kalt, Sl. *kőlti and the development of Indo-European molō-presents in Balto-Slavic, in Vytautas Rinkevičius (ed.), Proceedings of the 6th International Workshop on Balto-Slavic Accentology, Vilnius: Vilniaus universiteto leidykla (= Baltistica 7 priedas), 301–326.

Villanueva Svensson, Miguel 2012–2013, On the origin of the Greek type v $\omega\mu\dot{\alpha}\omega$, Sprache 50, 44–62.

Villanueva Svensson, Miguel 2013, Two Baltic irregular preterites: Lith. *dãvė* "gave", *ẽmė* "took", *Baltistica* 48, 225–244. Villanueva Svensson, Miguel 2014, Tone variation in the Baltic *ia*-presents, *Indogermanische Forschungen* 119, 227–249.

Vine, Brent 1998, The etymology of Greek κώμη and related problems, in Jay Jasanoff, H. Craig Melchert, Lisi Olivier (eds.), *Mír Curad: Studies in Honor of Calvert Watkins*, Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, 685–702.

Walde-Pokorny – Alois Walde, Julius Pokorny, Vergleichendes Wörterbuch der indogermanischen Sprachen 1–3, Berlin: de Gruyter, 1927–1932.

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