LITHUANIAN žinóti “TO KNOW”*

1. The root etymology of Lith. žinóti, Latv. zinát, OPr. -sinnat “to know” is perfectly clear (*-vênh- “recognize, know”).

Lithuanian žinóti, žino, žinójo belongs to a small group of “semithematic” verbs characterized by a present in *-â(-) and a second stem in *-â- together with bijóti, bijo “fear”, ieškóti, ieško “search for”, sáugoti, sáugo “take care of” and some other. In Daukša one finds 1 pl. žinomé, 2 pl. žinoté, perhaps pointing to an originally mobile paradigm.

The Latvian facts are more interesting. Beside the normal paradigm zinát, zina, zinâja, fully agreeing with that of Lith. žinóti, the dialects attest the unexpected plural forms 1 pl. zinim, 2 pl. zinit (beside regular zinâm, zinát) in addition to a thematic present zinu, zin, zin, zinam, zinat.

In Old Prussian we have the compounds po-sinnat “bekennen”, er-sinnat “erkennen”. The attested present forms (1/3 sg. -sina, 1 pl. -sinnimai, 2 pl. -sinnati) have been the subject of some controversy. The 1 pl. -sinnimai has frequently been directly equated with dialectal Latv. 1 pl. zinim (in spite of the 2 pl. -sinnati), but the parallel of the verb “to have”, 3 sg. imma, 1 pl. immimai, 2 pl. immati (: Lith. iũšti, ima), seems to indicate that synchronically -sinnat built a thematic present in Old Prussian (probably through shortening of Proto-Baltic 3rd person *žinâ) and doesn’t counsel equating OPr. -sinnimai with Latv. zinim.

Beside the stative verb meaning “to know” there is an inchoative Lith. pa-žinti, pa-žįstu, Latv. pa-zit, pa-zīstu “get to know”. Old Prussian -sinnat

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1 I use this term only as a descriptive label.

2 It is usual to separate these verbs from the slightly more common type of deverbative duratives with lengthened root vowel and acute intonation like klúpoti, -ö “be on one’s knees” (: klúpti, klumpa “kneel down”), etc. (e.g. LKG II 243; Otrębski 1965, 341).

3 Cf. Endzelin (1922, 618; 1951, 801f.).
corresponds in its usage to Lith. (-)pa-žinti.⁴ This fact may point to an exclusively East Baltic origin of the inchoative, specially considering the great productivity of sta-presents in Lithuanian and Latvian, but since sta-presents are so sparsely attested in Old Prussian in any case a secondary loss in this language cannot be absolutely excluded either.

2. There is every reason to take Lith. žinóti seriously as continuing an Indo-European verbal formation. The traditional and still standard view derives Lith. žinóti from an Indo-European nasal present to be equated with Ved. jánáti, YAv. 3 pl. paiti.zánonti, OPers. adána,⁵ Toch. A knánaṣ,⁶ OIr. ad-gnín,⁷ and perhaps (with very strong analogical remodeling) the Germanic preterito-present Go. kann/kunnun.⁸ The appeal of this equation is immediately clear: it derives žinóti from a securely reconstructed Indo-European present stem. But if we start from a canonical nasal present *gën-né-h₃-ti / *gën-n-h₃-énti Lith. žinóti poses at least two serious problems: the Baltic stem *žinā- (< *žin-nā-) instead of the phonetically regular *žinō-, and the dialectal Latvian plural forms 1 pl. zinim, 2 pl. zinit.

3. If taken at face value, Baltic *žinā- would point to *žin-nā- < *gën[h₃]-nēh₂-ti, but, as already observed, this is hardly reconcilable with the current reconstruction of Indo-European nasal presents.

In older days of Indo-European studies a reconstruction like *gën[h₃]-nēh₂-ti was less problematic than it is now. The nasal present of a root like *gneh₃- could simply be taken to contain a suffix *-nā-/*-nə-, the more so because the theoretical alternatives *-nō-/*-nə- and *-nē-/*-nə- seemed not to be

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⁵ See Mayrhofer, EWAia I 601, with references, on Indo-Iranian *jánáti instead of the phonetically regular *janáti.
⁶ See Hackstein (1993), with references, for attestations of the Toch. A present knāna- and the general paradigm of this verb.
⁷ See McCone (1991, 21f.) on the prehistory of OIr. -gnín.
⁸ The assumption of a nasal present would explain the geminate -nn-. Under any theory the singular must have been fully remade on the plural kunnun, but it is unclear how the 3 pl. -un can be justified from *gën-n-h₃-énti. Hardarson (1993, 80f.) assumes influence of the nasal present *kunno-/*kunn- in the weak stem of the inherited perfect *(ke-)knō-/*(ke-)kun-. He further derives ON kná “can” directly from the singular *(ke-)knō-, but ON kná is usually equated with the verbum purum OE cnāwan, OHG ir-knäen (< *knē-ja- “know, perceive”) and assumed to have been remodeled on the preterito-present má “be able, can; may” (so e.g. Seebold 1970, 302f.).

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attested with certainty. But it is now generally acknowledged that roots *ultimae laryngalis* made their nasal presents in exactly the same way as roots ending in a stop (type Ved. *yunákti, juñjánti* "join" < *ju-né-g-ti, *ju-n-g-énti, from *jeug-*), by infixing an ablauting nasal infix into the root in zero grade (e.g. Ved. *punáti, punánti* "clean, purify" < *pu-né-H-ti, *pu-n-H-énti, from *peuhH-). Even within this perspective the reconstruction *gyn[h₃]-néh₂-ti* apparently demanded by Lith. *žinóti* was thought to provide support for Meillet's view that nasal presents to roots *ultimae laryngalis* were originally restricted to roots ending in *₀h₃*- (1925; 1937, 217). In conformity with this view, some authors took the nasal present of *gyn₃*- to be a secondary creation, a dialectal suffixal *-néh₂*-present of the type Ved. *bdhnáti* "binds" (built to the anit root *bdn₃*- < *b₃média*), reflecting the post-Indo-European productivity of *-néh₂*- as an independent suffix. But even if Baltic and eventually Germanic were not included in the set, the agreement of Indo-Iranian, Tocharian and Celtic guaranties beyond reasonable doubt the prototypic character of the nasal present of *gyn₃*- . The fact that in addition to *gyn₃*-néh₃-ti a *ske*-o-present *gyn₃-ske/-o- is fairly well attested (Gk. *γιγνώσκω, OPers. xšnása-, Lat. (g)nosecō, Alb. njoh, Arm. čanačem*) represents no problem for the Indo-European character of *gyn₃*-néh₃-ti, as it is quite common that two or more presents need be reconstructed for a given Indo-European verbal root. In any case, further

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9 So e.g. Brugmann (1902/04, 511).

10 This analysis goes back to de Saussure (1879, 239ff.). For our present purposes it is irrelevant whether the nasal infix had ablaut *-ne/-n- from the very beginning or was originally a non-ablauting *-n- infixed to a root with the same ablaut pattern as that of the root aorist (thus implying that *ju-né-g-ti is secondary for earlier *iéu-n-g-ti*).

11 So e.g. Vendryes (1935/36), Stang (1942, 145; 1966, 323), Fraenkel (1950a, 87; 1950b, 258f.).

12 No position need be taken here on the interpretation of Hitt. *ganess₃-mi* "recognize, find" as an s-present (deserative) with "Narten" root ablaut, as advocated by Jasanoff (1988; 2003, 133, 192), or as a sigmatic aorist to be equated with Ved. *ajnāsam*, Toch. *kñāṣāśnt*, as per LIV 2 168f. Most languages continuing a *ske/-o*-present show an unexpected root vocalism that at least in some cases can be explained as more or less easily understandable analogical remodeling starting from a perfectly regular *gyn₃-ske/-o- (see the various solutions offered by Klingenschnmitt 1982, 686-10), but can also be interpreted, with Jasanoff, loc. cit., as reflecting the influence of *gyn₃-s/-gyn₃-s*- in the root vocalism of the more recent *ske/-o*-present (*gyn₃-ske/-o- > Alb. njoh, Arm. aor. caneay, *gyn₃-ske/-o- > Lat. (g)nosecō).
research has led to the general modern abandonment of Meillet's view that nasal presents to roots ultimae laryngalis were restricted to *-ne-h₂-.¹³

Accordingly, it is unavoidable to start from a regular *₇n-*né-h₃-ti. Strunk's suggestion that *₇n-*né-h₃-ti > *žin(n)ō- could give *žinā- directly (1967, 39) is not compatible with our current understanding of Baltic historical phonology.¹⁴ In most treatments the problem is not directly addressed or a reconstruction *žin-nā- vel. sim. is given without further commentary,¹⁵ probably under the assumption that at some stage of its development *žin-nō- was analogically attracted to the class of -na-h₂-presents, as made explicit by some authors.¹⁶ Given the lack of secure parallels, a general replacement of presents in *-no-h₃- and *-ne-h₁- by those in *-na-h₂- in pre-Baltic or Balto-Slavic cannot in principle be excluded, but it cannot be better supported either and there doesn't seem to be any particularly evident motivation favoring such a process. The putative replacement of *žin-nō- by *žin-nā- is thus bound to remain uncomfortably ad hoc.

A different approach has been essayed by Bammesberger. Since synchronically žinōti belongs to the type of bijōti, iėskōti, sąugoti, etc., he assumes a secondary transfer to this class. In (1988, 113) he takes the 2 sg. *žinō+ei > žinai as the starting point, while in (1993, 87f.) he prefers to start from the present participle *₇n₃h₃-ont/-₇nt- > *žin(n)ant- at a time when the paradigm was still characterized by an alternation *žinō-/*žin- beside *bijā-/*bij-. I doubt none of the forms adduced by Bammesberger could provide a sufficient motivation for the transfer into the class of bijōti. In addition, notice that the present participle is attested as zinis in Latvian dialects (see below).

4. As far as the second problem is concerned, the dialectal Latvian plural forms 1 pl. zinim, 2 pl. zinit are lectio difficilior vis-à-vis the regularly formed Latv. žinām, žināt, Lith. žinome, žinote, and should in principle be embraced under any theory on the origin of žinōti.

¹⁴ Cf. Stang (1966, 44, 47ff.).
¹⁶ So Klingenschnitt (1982, 177) [*žinā- for *-nō- after zero grade *žin- < *₇n-n-h₃- or *žina- < *₇n-n-₃-], Derksen (1996, 338), Babik (2004, 73ff. [apparently assuming generalization of *-na-h₂- over *-ne-h₁-, *-no-h₃- already in Indo-European, which is patently false]).
In the older literature the dialectal Latvian present paradigm *zinu / zinim* (and eventually also OPr. *-sinna / -sinnimai*) was frequently equated directly with the stem alternation of Vedic *jānāmi / jānīmāḥ*.\(^{17}\) The possibility of an ablaut pattern *-*nāi- / *-nī-* for some verbs of the Vedic 9\(^{th}\) Class of presents and its possible survival in Latv. *zinim*, OPr. *-sinnimai* could enjoy some appeal at the end of the 19\(^{th}\) century and beginning of the 20\(^{th}\),\(^{18}\) but it never became generally accepted and today it is of course entirely untenable. It has long been recognized that the -ī- of Ved. 1 pl. *jānīmāḥ*, 2 pl. *jānīthā* is the reflex of a vocalized laryngeal and that the reconstructable forms 1 pl. *ḡn-ṇ-h₃-mēs*, 2 pl. *ḡn-ṇ-h₃-t(ṇ₂)ē* would give Baltic * żin(n)-mē*, *żin(n)-tē*.\(^{19}\)

As it is well known, an unexpected -i- in the plural is not restricted to *zināt* alone, but is also encountered in Latvian dialects for two other verbs with a second stem in *-*ā-, raūdāt, raūdu “cry, weep” and dziēdāt, dziēdu “sing”: 1 pl. raūdīm, dziēdīm, 2 pl. raūdit, dziēdit, as well as 1 sg. raūžu, dziēžu (a 1 sg. *zinu*, on the other hand, is rare). The antiquity of the i-forms is supported by the dialectal present participle raūdis, dziēdis, zinis,\(^ {20}\) and by the occasional transfer of these verbs to the ē-inflection *raudēt*, *dziēdēt*, *zinēt*.\(^ {21}\) In Old Lithuanian raudoši, rūumi “weep”, giedotì, giemì “chant” belong to the most firmly established athematic presents. Endzelin (1928; 1938, 495; 1948, 182; 1951, 801) explained the plural i-forms of raūdāt and dziēdāt as abstracted from a 3 pl. *raud-int*, *geid-int < *-ņti*, where -i- was reinterpreted as part of the stem and extended as a union vowel to the other plural forms. He further compared OPr. 1 pl. waidimai, 2 pl. waiditi (2 sg. waisei, inf. wast “know”) and the irregular Slavic verb *spati*, *spi- “sleep”.

A similar explanation could be offered for Latv. *zinim*, *zinīt*. This step was not favored by Endzelin himself, who stuck to the old comparison of Latv.

\(^{17}\) E.g. Trautmann (1910, 280), Endzelin (1922, 618; 1938, 179; 1943, 111; 1948, 183; 1951, 801f.), Fraenkel (LEW 1311; 1950a, 95). This view is still accepted by Toporov (1979, 86).

\(^{18}\) See the references given by Trautmann, loc.cit., and Endzelin, loc.cit.

\(^{19}\) So already Stang (1942, 145).

\(^{20}\) Cf. Endzelin (1922, 718ff.; 1951, 929ff.).

\(^{21}\) See the facts assembled by Endzelin (1933). I remain skeptic of Schmid’s attempt to diminish the validity of Latv. *zinim*, *zinīt* (1963, 7), that he seems to consider a specifically dialectal Latvian phenomenon (although no explanation is actually offered). The range of forms involved points to the historical reality of the i-forms of raūdāt, dziēdāt and zināt.
zinim with Ved. jānīmāḥ. However, while still maintaining the derivation from a nasal present, in the addenda to his Senprūšu valoda (p. 131) he considers the possibility of a Baltic plural paradigm *žin-mē, *žin-tē, *žin-int(i) < *žin-ŋt(i), with extension of -i- as in Latv. raūdim, -it, dziēdim, -it. The difficulty of this explanation, of course, is that a 3 pl. *ɡn-ŋ-h₃-ŋtį is incompatible with the current reconstruction of the 3rd plural of nasal presents (*ɡn-ŋ-h₃-ęnti > Ved. jānānti). Such an explanation is nevertheless mentioned as a possibility by Schmalstieg (2000, 119), and defended by Babik (2004, 76). Babik postulates that in Balto-Slavic the 3rd plural of athematic verbs had been generally reshaped as *-ŋti. However, none of the few examples he gives in support of this view is probative: the putative Balto-Slavic 3rd plural stem of old perfects like *uaid-i-, *gor-i-, underlying OPr. 1 pl. waidimai, 2 pl. waiditi and the i-inflexion of OCS goritb, can go back, in the last instance, to a 3rd pl. *-ţ. The prehistory of (Lith.) rąumi and gėmi is less clear, but a Narten present can be considered a distinct possibility (see below §6.4.). In any case, this view would be unable to explain why no more traces of an athematic 3 pl. *-inti (as well as its extension to the 1st and 2nd plural) are attested among inherited active athematic presents of the normal type, but are restricted to a handful of verbs, some of which certainly do not go back to athematic presents.

A different approach to Latv. zinim, zinit was essayed by Stang (1942, 145f.; 1966, 323f.). Stang views the apparent i-inflexion of Latv. raūdim, -it, dziēdim, -it as a substitute for the old athematic inflexion. Accordingly, he interprets zinim, -it as evidence for an old paradigm *žīnāu, *žīnāi, *žīnā, *žīnmē, *žīntė, which would provide support for the assumption of an old nasal present *gnāt : *gnāmē. The fatal objection was already noticed by E. Udzelin (1943, 131): had Baltic inherited a paradigm with 1 pl. *žīnmē, 2 pl.

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22 A further possibility of obtaining a pre-Baltic *ɡn-ŋ-h₃-ŋtį would be to postulate a class of Indo-European acrostic nasal presents, a possibility tentatively enounced by Oettinger (1979, 169f.) and Klingenschmitt (1982, 176f.21), and defended by Isebaert (1985), who in fact reconstructs a nasal present *ɡn-ŋ-ěh₃-tį / *ɡn-ŋ-ěh₃-ŋtį (349f.). It is doubtful whether any of the theoretical preforms would led to pre-Baltic *zin(n)-int(i) – unless resorting to an even more problematic Schwebetablaut *ɡėn-ŋ-h₃-tį / *gēn-ŋ-h₃-ŋtį. In any case, the evidence in favor of acrostic nasal presents can be termed inconclusive at best, and in the case of the various reflexes of the nasal present of *gneh₃- it would amount to too much unwarranted analogical rebuilding to be a credible alternative.
*žintē beside *žinā(-t), we would certainly expect the plural to be regularized as *žināmē, *žinātē, as it indeed happened in Lithuanian and also for the most part in Latvian. The same criticism holds for raūdim, -it and dziēdim, -it. Notice that Old Lithuanian athematic presents are not replaced by i-presents unless they are supported by a second stem -ē- (and here in concurrence with ēja- and a-presents).

Apart from these, I am aware of very few attempts to explain Latv. zinim, zinit. Schmalstieg (2000, 119f.) suggests the possibility of an ē-verb *gnē- beside žinōti, from which the i-forms would have been borrowed. *gnē- could find a correlate in the Germanic 3rd Weak Class Go. ga-, uf-kunnan, -aipp “recognize”, but it is doubtful whether Go. -kunnan can really support the reconstruction of a pre-Baltic *gnē-, and the contamination of both present stems *žini- and *žinā- would remain to be explained. Karulis (1992, 1196) takes žinōti, zināt to be an original i-verb, but this is of course an oversimplification that wouldn’t explain the stem *žinā-. Vaillant (1966, 363) considers Latv. zinim, zinit secondary neologisms, perhaps created on analogy of minēt “mention”, but such a recourse to analogy in order to motivate an aberrant paradigm can hardly be taken seriously.

Kortlandt (1987, 109) starts from the following paradigm for early Prussian: 1 sg. *zinā, 2 sg. *zinā(se)i, 3 sg. *zināi, 1 pl. *zinima < *zininma, 2 pl. *zinte < *zinnte, 3 pl. *zina and suggests that “the difference between the 1st and 2nd pl. forms must have arisen as a result of the different chronological order of syllabification and simplification of the respective consonant clusters”. The 2 pl. *zinate (er-sinnati) would have been remodeled on the 3 pl. *zina. In another publication (1989, 104) he observes that OPr. -sinnimai, Latv. zinim “show that the original apophonic alternation between sg. -nā- from *-neH2- and pl. -n- from *-nH2- was preserved in Baltic”, thus perhaps implying that the same explanation offered for Old Prussian is valid for Latvian and that the 2 pl. zinit is analagical after zinim. In any case, Kortlandt’s account is based on too many questionable assumptions to be credible. I doubt forms like *gnē-nH2-mēs, *gnē-nH2-tē (assuming a problematic replacement of *-n(e)-h3- by *-n(e)-h2-) would have led to anything else than to *žin-mē, *žin-tē quite early, as more or less explicitly assumed by all proponents of the nasal present approach.

5. In brief, derivation of žinōti from a nasal present is forced to ad hoc and dubious assumptions in order to account for the Baltic stem *žinā- and even more for the dialectal Latvian plural forms zinim, zinit. The attractiveness of a
connection of źinóti with Ved. jānāti etc. was stronger in earlier days of Indo-European studies, when it was compatible with views that further progress has shown to be false. Nevertheless, it remains by far the most favored approach in the literature. Alternatives to this view can be reviewed here.

Vaillant (1966, 264, 362) derives źinóti from a Balto-Slavic stem *źnō- continued directly in OCS znati, znaje-. It would have taken its root shape *źin-, generalized in Baltic with few exceptions (Latv. znuôts “son-in-law”), from the inchoative Lith. pa-žânti, Latv. pa-zēt, and would have been attracted to the verbal class in -âti. But there is no particularly clear motivation for the transformation of a putative Baltic (Lith.) **źnûotì, **źnûøju in the way envisaged by Vaillant. Apart from the dubious explanation of the root shape *źin-, it must face the same problems that the nasal present theory does.

Schmalstieg (2000, 121) suggests that an aorist (or perfect) *gônō- would give Baltic *źinō- through a Sievers’ variant *gûnō-. With addition of the personal endings we would have 1 sg. *źinōu, 2 sg. *źinõi > *źinou, *źinoi > *źinau, *źinai, which would provide the motivation for the transfer to the type bijòti. There are several dubious aspects in this scenario. Recourse to a Sievers’ variant is ad hoc. Had Baltic inherited a stem *ź(i)ñō-, I would have expected regularization as a ia–present *ź(i)ñô–ja– rather than a cursory addition of the personal endings. The possibility of deriving źinóti from a root stem *gñō– (and Latv. 1 pl. zinim from *gñemē) was already discussed by Stang (1942, 146²), where he considers that *–ā– could come from *–ō~, a view that he later abandoned. But, as Stang observes, *gñeh₃– was an aoristic root (cf. Gk. εγνω etc.), that would not in principle have been recategorized as a present in Baltic.

An entirely different approach to źinóti has been recently proposed by Smoczyński (2000, 93¹¹⁸; 2001, 158, 171, 369f.⁹; 2005, 50ff., 336ff.), followed by Ostrowski (2001, 69; 2006, 51). Smoczyński interprets źinóti as a “normal” ź-stative *źinâtēi, *źinâja, *źinâjâ derived from the inchoative Lith. pa-źânti, Latv. pa-zēt. The same interpretation is offered for Lith. bijōtis(s), Latv. bijâtiès, OPr. biâteiwe “fear”, where the derivational basis would have been lost in Baltic. The actually attested present forms Lith. źino, Latv. zina, OPr. -sinna would derive from *(pa)źinâjâ through apocope of the final present suffix -ja. As for the inchoative pa-źânti, -źista, -źino, Smoczyński takes it as a denominative from the verbal adjective pa-źintas < *gûn₃-tô– (paźânt-sta > paźins-sta > paźâsta, with, I suppose, infinitive -źinti and preterit -źino through false resegmentation as paźin-sta). I fail to see the need of taking pa-źânti as a
denominative. Ostrowski (2006, 50f.) prefers taking pa-žinti as built to the preterit pa-žino, which would continue a thematic aorist based on the 3rd pl. *gēh₁jōnt of the original root aorist. However, neither in Slavic nor in other languages are thematic aorists usually derived from roots ending in *oEH-, and the parallel of preterits like stó-jo “stood up” or dé-jo “put” indicates that in Baltic as well this was not the usual way of dealing with inherited root aorists to roots like *gneh₂-. In any case, the East Baltic inchoative Lith. pa-žinti, Latv. pa-zīt is too trivially explained as an innovation to be a credible derivational basis for žinōti, a view partially supported by OPr. -sinnat, which corresponds in its usage to Lith. (-)pa-žinti. The dialectal Latvian plural forms zinim, zīnt are not mentioned by Smoczyński or Ostrowski and, in general terms, it is hardly credible that all Baltic languages would have agreed in transforming a perfectly regular *(pa)žināja into a verb belonging to an unproductive type (as in Lithuanian and Latvian) or even into an irregular verb (as in dialectal Latvian).

6. As an alternative to the derivation of žinōti from a nasal present, Bammesberger (1993, 8814) mentions the possibility of deriving it from a perfect *ge-gnō-/*ge-gna- (Ved. jajnāu), a possibility considered very likely by Schmalstieg (2000, 120f.) as well. A parallel would be furnished by bijōti “fear”. In what follows I will argue for the correctness of this view, which in my opinion offers additional advantages for explaining the actually attested forms of žinōti in the Baltic languages and has interesting implications for the reconstruction of the Balto-Slavic verb in more general terms.

6.1. As correctly appreciated by Bammesberger and Schmalstieg, it is important to emphasize that bijōti, bijo “fear” offers a virtually perfect parallel for the derivation of žinōti from a perfect, as the morphology of both verbs is virtually identical. The prehistory of bijōti is reasonably clear. It continues the perfect of the root *b₁eH- cognate with Ved. bibhāya, YAv. ptcp. bijuuvā, OCS bojati, boji- sę “fear”, and the Germanic 3rd Class Weak verb OHG bibēn, OE bifian, OIC. bifa “tremble”, which almost certainly arose through resegmentation of *be/ibai(-pi) (< *b₁e/i-b₁ōH-e) as *be/ib-ai-þ(i). A sta-inchoative is not attested in Lithuanian, but an inchoative bītiēs, bistuōs has been created in Latvian to the stative bijāt, bijāju.

Taking this view seriously entails providing an explanation for the contrast between the 0-grade and regular i-inflexion of Slavic bojati, boji- sę and the

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23 I don’t understand the criticism of this idea by Babik (2004, 76).
zero grade and inflexion as a “semithematic” ā-verb of Baltic *bijāti. There is hardly any need to say that a theory deriving both the Slavic and the Baltic verb from a single Balto-Slavic paradigm should be given priority over positing two independent formations (which would basically amount to take bijóti as a somewhat unmotivated derivative of a lost *bajěti). Had Baltic inherited a regular ũ-verb as that of Slavic, the change of inflexion into an ā-verb would not be easy to motivate. Slavic bojati is universally derived from a second stem *boj-ė-ti. Although phonetically irreproachable and perfectly in accordance with the rest of Leskien’s Class IV B verbs, a case for *boj-ā-ti can be advocated from the existence of two Slavic Class IV B verbs with an irregular second stem in *-ā-: sõpätı, sõpī- “sleep”, and sõcätı, sõčī- “piss”. Assuming a second stem in *-ā- for Balto-Slavic would have the advantage of providing a motivation for the transfer into the “semithematic” ā-class in Baltic.

This Balto-Slavic verb must have displayed ablaut in its paradigm. Two possibilities, not necessarily mutually exclusive, come into mind: either the present (< old perfect) still preserved the old ablaut pattern *boj- : *bī-/*bij- (< *bʰe/i-bʰóiH- / *bʰe/i-bʰiH-’), or the second stem in *-ā- triggered zero grade of the root, irrespective of the ablaut of the present (i.e., pres. *boj- : *bī-/*bij-, inf. *bij-ā-, or pres. *boj-, inf. *bij-ā-).

The divergence of treatments of this verb in Baltic and Slavic would be easier to understand if it didn’t display regular ũ-inflexion in the present, but still kept part of its original athematic inflexion. For reasons that will become clear immediately I would assume athematic inflexion (perhaps with partly preserved perfect endings as in OCS vědě), with a plural (and eventually dual) stem characterized by a union vowel -i-, in the last instance derived from a 3rd pl. *-u/t(i) or *-r$: 1 sg. *baj-m(a)i or *baj-u/i, 2 sg. *baj-s(a)i, 3 sg. *baj-ti or *baj-ei, 1 pl. *baj-i-me or *bij-i-me, 2 pl. *baj-i-te or *bij-i-te, 3 pl. *baj-i(nti) or *bij-i-nti.²⁴

It goes without saying, the proposed reconstruction of the Balto-Slavic prototype of Lith. bijóti and OCS bojati would be somewhat gratuitous if it could not be supported by at least a handful of verbs that could be argued to have had a similar paradigm and a similar history. I believe bijóti/bojati and žinóti made part of a small but still recognizable class of Balto-Slavic

²⁴ There is no need to insist on the correctness of all the details of this reconstruction, a large part of which has been rendered irrecoverable by the subsequent evolution of Baltic and Slavic.
verbs characterized by the features proposed for bijótí/bojátí: 1) a second stem in *-ā-, 2) an independent present, usually athematic and characterized by a union vowel -i- in the plural, 3) paradigmatic ablaut, perhaps limited to different types of vocalism in the present (reflecting its different Indo-European origins) as opposed to zero grade in the infinitive and aorist stem. A survey of possible candidates can be given here:

6.2. Lith. miegótí, miegù "sleep", with a very well attested athematic present miegmi (cf. OPr. meicté / moicte), and its Slavic cognate měžati, měží- "have the eyes closed" look very much like a perfect word equation. Old Lithuanian still preserves the original athematic present. The Slavic inflexion as an i-verb would be easier to understand if the plural was characterized by a union vowel -i-. This would motivate its transfer to Leskien's Class IV B and the subsequent replacement of the second stem *-ā- by *-ē-. The contrast between the full grade of Baltic and the zero grade of Slavic points to original ablaut, which I would posit as pres. sg. *meig-m(a)i : pl. *m(e)ig-i-me, inf. *mig-ā-tēi. I derive miegótí/měžati from an Indo-European middle root present, perhaps a Narten present in origin. This view is supported by Ved. ni-mégāmāna- "herabschimmernd, niederblinzeln" RV 2.34.13, 8.4.10, whose unpalatalized velar -gh- can be explained as due to a relatively late thematization of a root middle present *meigʰ-or. If derivation from a perfect would be preferred, this wouldn't change anything for our present purposes. I refer to Villanueva (2004) for a fuller argumentation.

6.3. Lith. ieškótí, ieškau “search for”, Latv. iēskāt, iēskāju “look for lice”, with the inherited thematic present still attested in OLith. ieszku (Universitas), and OCS iskati, iskɔ (usually replaced by išto with generalization of the stem ište- < *iske-) clearly continue an Indo-European ske/o-present (: Ved. iccháti, YAv. isaiti, etc., cf. LIV² 260). The accentual variants in Slavic (Scr. iškati, ištěm and iškati, ištěm, Russ. iskáť', iščú, iščeš, OCz. jiskati, Slovak iškat') make it reasonable that the second stem had zero grade, *jòskati.²⁵ It thus seems reasonable to reconstruct a Balto-Slavic paradigm pres. *eíska/e-, inf. *iskā-. The explanation of the vocalism of the present stem *eíska/e- is notoriously difficult,²⁶ but the extension of the present stem -sk- through

²⁵ Cf. Vaillant (1966, 204), and especially Strunk (1994, 393ff.), for a discussion of the Slavic evidence.

²⁶ The ultimate explanation of Balto-Slavic *eíska/e- is not crucial for our present discussion. Klingenschmitt (1982, 67⁵), suggests either univerbation with a preverb *eh₁-h₁is-ské/ó-, or the influence of the sigmatic aorist *h₂ēis-s-. Jasanoff (2003, 192)
all the paradigm is clearly an innovation (an original sigmatic aorist is still preserved in GAv. āiš), and indicates that the zero grade of the second stem is best taken as a feature triggered by the suffix *-ā-.

6.4. Athematic present forms of Lith. raudótí “weep” and giedótí “chant” (1 sg. ráumi, giemi, etc.) are fairly well attested in old texts and the dialects. As already observed (§4), Latv. raudāt “cry, weep” and dziedāt “sing” show unexpected plural endings 1 pl. -īm, 2 pl. -īt in some dialects. There are thus good reasons to assume an original paradigm pres. *raud-m(a)i : *raud-i-me, inf. and pret. *r(a)ud-ā-. The possibility of original ablaut can not be ascertained from the available evidence, as verbs of the class we are studying display a clear tendency to level out ablaut in the daughter languages.

The root etymology of giedótí is clear (Ved. gāyati “sings”, verbal adjective gītā-).27 Apparently we have to start from *geiHd-, either from *g(w)eH-i-d(h)-, or as an innovated full grade to the zero grade *g(w)iH-d(h)- (< *g(w)Hi-d(h)-), but the ultimate analysis of *geiHd- is unclear (d(h)-present? d(h)-enlargement?) and, accordingly, the same holds true for the historical interpretation of its morphology.

The case of raudótí is more promising but equally problematic. An athematic present is attested in Ved. róditi, rudánti “weep”. Lat. rudere “cry out, bray”, rūdere (since Persius), and OE rēotan, OHG riosan “weep” are perfectly compatible with the reconstruction of an athematic present *réudH-ti / *rudH-énti. A base *rud- seems to underlie the Slavic iterative OCS rydāti, rydajō “weep, lament”. I would suggest the second stem of a Balto-Slavic paradigm pres. *raud-m(a)i, inf. *rud-ā- as the derivational basis of rydāti, but other possibilities cannot be excluded.

If we start from a normal athematic present with 3 pl. *rudH-énti the dialectal Latvian forms 1 pl. raūdim, 2 pl. raūdit would be exceedingly difficult to account for (cf. also the East Lithuanian imperative raudy). Endzelin’s

assumes influence of a lost acrostatic s-present (desiderative) *h₂ēīs-s– in the root vocalism of *h₂ēis-skē/ó– (as in the case of *gnēh₂–, see above fn. 12). In any case, I doubt *ēiska/e- can be explained as a recent Balto-Slavic innovation. Vaillant and Strunk, loc. cit., favor a Balto-Slavic paradigm *eiska/e- : *iskā-, but the acute of Lith. ieškau can hardly be explained as secondary (Vaillant’s explanation as analogical to that of giedu is clearly unsatisfactory – the class of verbs we are studying show no tendency to generalize the acute intonation in Baltic).

27 Cf. LIV2 183.

28 With metathesis *EHiT- > *EiHT-, cf. Smoczyński (2006, 166f.).
derivation from \( ^{*}\text{raud-int} < ^{*}\text{réudH-ŋtī} \) remains the most satisfactory explanation, but a 3 pl. \(^{*}\text{réudH-ŋtī} \) would imply a Narten present with 3 sg. \(^{*}\text{réudH-ti} \), in apparent contradiction with the Vedic paradigm.

A case for an original Narten present has been argued by Hollifield (1977, 64ff.) and Vine (1981, 18ff.). In addition to the Baltic \( i \)-forms, an original Narten present would be supported by the acute intonation of \( \overset{\text{ráusti/}}{\text{ráuda}} \) and by the Avestan evidence. The Baltic acute, however, can now be explained through Winter's Law and is thus of no diagnostic value. In Avestan we find a 3 sg. injunctive middle GAv. \( \overset{\text{raostā}}{\text{Y. 29.9, YAv. raosta Y. 9.24}} \) "cried out". Because of its full grade \( \overset{\text{raostā}}{\text{is traditionally interpreted as a}} \) sigmatic aorist,\(^{29}\) but no sigmatic aorist is attested in Vedic nor in any other Indo-European language. In addition, old sigmatic aorists are hardly ever found beside root athematic presents in Indo-Iranian.\(^{30}\) \( \overset{\text{raostā}}{\text{can also be taken as an athematic present.}} \)^{31}

The picture is complicated by the Vedic thematic aorist \( \overset{\text{árudat}}{\text{AV 14.2.50}} \) and the Young Avestan zero grade forms \( \overset{\text{uruθən V. 9.32, uruθat F. 9, uruθənta V. 19.45.}}{\text{The analysis of the Avestan forms is problematic. They could be taken as a}} \) \( \overset{\text{tudaći-present (thematized from the 3 pl.}}{\text{*rudanti,}} \) as a thematic aorist to be equated with AV \( \overset{\text{árudat,}}{\text{or as an athematic present, as per Kellens (1984, 88). If we opt for a thematic aorist, continuing an Indo-European root aorist (perhaps exclusively or predominantly inflected in the middle, as per Hollifield, loc. cit.), this would lend support to the assumption of a derived Narten present \( ^{*}\text{réudH-ti} / ^{*}\text{réudH-ŋtī}, \) but the evidence is too problematic to allow for a strong position.}} \)

In any case, the replacement of a Narten present by a "normal" athematic present in the prehistory of Vedic and apparently also in that of Latin \( \overset{\text{rudere / rūdere}}{\text{is not easy to motivate either. We could perhaps start from a}} \) renewed plural \( ^{*}\text{réudH-ŋtī} \rightarrow ^{*}\text{rudH-énti} \) (as in \( ^{*}\text{stéu-ŋtī} \rightarrow \overset{\text{Ved. stuvánti}}{\text{to singular}} \overset{\text{stáuti}}{\text{"praises"}}, \) that would have triggered the replacement of 3 sg. \( ^{*}\text{ráuditi} \) by \( \overset{\text{rōditi}}{\text{. If we opt for a presentential root (in which case the thematic aorist Ved.}} \overset{\text{árudat must be secondary, whatever its ultimate explanation might be,}}{\text{I can see two further possibilities in order to reconcile Ved.}} \overset{\text{rōditi}}{\text{ / rudánti}} \) and Lat. \( \overset{\text{rudere}}{\text{ / rūdere}} \) with GAv. \( \overset{\text{raostā}}{\text{and the putative pre-Baltic 3 pl.}} \overset{\text{*ráud-int(i),}}{\text{}}} \)

\(^{29}\)E.g. Kellens (1984, 88), LI\( V^2\) 508.

\(^{30}\)Cf. Narten (1964, 81).

\(^{31}\)So also Kellens-Pirart (1990, 311).
in addition to simply taking Ved. róđiti / rudánti as secondary. On the one hand, we could assume that a Narten present *réudH-ti / *réudH-nti was derived from the “normal” root present *réudH-ti / *rudH-énti. As a second possibility, I would suggest that “normal” root presents like *réudH-ti / *rudH-énti originally had a middle with full grade of the root (an idea on which I hope to publish at length elsewhere), in which case GA.v. raostã and Baltic *ráud-int(i) would represent a precious archaism (*réudH-tor / *réudH-ntor, presumably replacing older *réudH-or / *réudH-ror vel. sim.). Both possibilities, specially the second one, entail a serious revision of the Indo-European verbal ablaut that can not be reasonably accommodated here.

6.5. The etymology of the other Baltic verbs of the type bijóti is uncertain and little can be said of their prehistory.

Lith. sáugoti, -o (also -oja), Latv. saúdzét, -u/-ēju “take care of” and Lith. sérgëti, sérgi, Latv. saūgāt, -u/-āju “guard, watch over” show a similar meaning and the same curious fluctuation between ā- and ē-inflection in Lithuanian and Latvian, in addition to the difference in root vocalism between Lith. sérgëti and Latv. saūgāt. Nevertheless, they look like perfect word equations and should in principle be derived from a common Baltic paradigm. Both sáugoti and sérgëti show plenty of athematic present forms (3rd person sáugti, sérgti) in Old Lithuanian texts. The athematic present of sérgëti is better represented than that of sáugoti, what has led to the assumption that the athematic present of sáugoti is analogical to that of sérgëti. This is possible, but far from assured. I would reconstruct the Proto-Baltic paradigm of sáugotí/saúdzét as pres. *sáug-m(a)i / *sáug-i-mē : inf. and pret. *sáug-ā-, and suggest an early extension of -i- through all the present stem in Latvian, finally leading to the replacement of the infinitive *sáug-ā-ti by *sáug-ē-ti.

The case of sérgëti/saūgāt is more involved. The antiquity of both the e-grade and the second stem *-ē- is supported by OPr. absorģīsnan “Schutz”. On the other hand, saūgāt, -u is the only verb that has preserved the inflexion of the type bijóti, bijo in Latvian. The same fluctuation in root vocalism recurs in Lith. gēlbëti, -stī/-ēja “save”, with a well attested Old Lithuanian athematic present gēbūti, vis-à-vis OPr. 1 pl. galbimai, opt. 3 sg. galbsai, galbsē, ppp. pagalbtōn.33 Stang (1966, 311) takes the a-vocalism as ancient and as evidence

32 In addition, notice the abundance of present stems of sérgëti listed in LKŽ XII 427, that clearly point to different renewals of an inherited athematic present.

33 Cf. Mažiulis, PKEŽ I 316, III 305.
for an original perfect, but the e-grade of sérgeti/absergisnan and gélbéti is not easily motivated within this perspective. Contamination between different verbs, all of them equally inherited, cannot be ruled out, but the ultimate explanation of the variation in root vocalism and second stem of these old athematic presents remains obscure to me.

Lith. kabóti, kābo (beside kabéti, kāba) and karóti, kāro have the same meaning “hang (intr.), be suspended”. The relationship of karóti, kāro to kárti, kária “hang (tr.)” is unique. Derivatives of the type brýdoti, -o “stand in water” (: bristi, breīda “ford, wade”), kýboti, -o “hang (intr.)” (: kibti, kirba “stick, cling to”), or of the type kilóti, -ója “lift (iter.)” (: kelti, kelía “lift”) are not otherwise used to derive an intransitive verb from a transitive one. The o-grade of karóti could be derived from a perfect, but this would leave the transitive kártri without a good explanation. I suggest comparing the pair kárti : karóti to the semantically related Germanic pair of strong verb *hanhān, -īp “hang (tr.)” (Go. hahan, OHG hāhan) and 3rd class weak verb *hangan, -aiḥ “hang (intr.)” (Go. hahan, OHG hangēn), continuing an original voice opposition between a “h2-e-conjugation” molō-present *könk-e(i) / *k(e)n̂k-r(s) (vel. sim., cf. Hitt. kǎnk-“hang”) and its middle *könk-or (cf. Ved. sāṅkate “hesitates”, with accent shift to *konk-ōi in the prehistory of Germanic). Within this perspective, kārti, kária would stem from the active of a molō-present *kórH-e(i) / *kérH-r(s) “hang (tr.)”, while karóti, kāro (probably replacing an earlier athematic present *kar-m(ai) would continue its middle *kórH-or “hang (intr.)” (perhaps for earlier *kérH-or, with leveling of root vocalism in the prehistory of Baltic). The pair kabóti, kābo beside kabéti, kāba is reminiscent of that of sérgeti / sāngāt and sāugoti / saūdzēt and equally problematic. kabóti could simply be analogical to karóti, as suggested by Kortlandt (1989, 105), but this can of course not be ascertained.

6.6. As already observed, two Slavic verbs of Leskien’s class IV B show an unexpected second stem in *-ä-: sōpati, sōpi-, “sleep”, and sōceti, sōči- “piss”.

The etymology of sōpati is clear (*sōp- “fall asleep”). Hitt. [sul]pzi, 2 pl. imper. supṭen (beside middle forms suppatta, supṭāri, suppari), and Vedic pres. ptcp. svapánt-, 2 sg. imper. svapa, 3 sg. imper. svāptu (AV) point to an inherited active root aorist *su̯ēp-t/*su̯ēp-ént. A perfect *se/u-su̯ōp-/ *se/u-su̯- is continued in Ved. susvāpa. A Narten present *su̯ēp-/*su̯ēp- seems to be implied by the “Narten” causative *su̯ōp-je/o- “put to sleep” (> Lat. sōpire

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34 See Jasanoff (2003, 72ff.) on the reflexes of *kenk- and the reconstruction of the Indo-European paradigm.
"cause to sleep", ON sófa “kill”). Beside the stative sępati Slavic attests an inchoative OCS u-sępəti, pres. -sęne- (RCS -sęple-), aor. -sępe “fall asleep”, with a je/o-present later replaced by the expected ne-present that could well be ancient. Jasano off (2003, 160) derives sępati from a present *sup-ór, but this type is otherwise exclusively found beside middle root aorists, whereas the Hittite and Vedic evidence slightly suggests that *sęep- built an active root aorist in Indo-European. I see two possibilities for sępati: either it stems from the perfect *se/u-sępə- / *se/u-sup-,36 or from the Narten present *sęep- / *sęep-. The generalized zero grade could stem from the second stem *sup-ā-, but other possibilities cannot be excluded. I refer to Villanueva (forthcoming §4.1.) for a fuller discussion.

The case for an inherited present *sikw-ór is much better in the case of sćaci, sći- “piss”, that can be directly equated with TA 3 pl. sikamṯār “flood”, a middle root aorist being perhaps directly continued in the Vedic passive aorist abhy-āšeci (ŚB) “was anointed”, with “suppletive” sigmatic I sg. abhyāśikṣi (MS”), and in the TA class V subjunctive seguṣ. The active system seems to have involved an active root aorist *sēkw-t/*sikw-ent, thematized in Ved. ásacat “poured” (unless from a secondarily transitivized middle), and a nasal present Ved. sīncatī, YAv. hincaiti “pours”. A second stem in *-ā- beside a prototypic present of the type *dʰugʰ-ór is rather unexpected in Balto-Slavic. I wonder whether Slavic sćaci and TA sikamṯār could not be united with Ved. sćacat “is poured” and the Germanic strong verb OHG sīhan, OE sēon “strain” under a Narten present *sēkw-t/*sikw-nt, but I am not aware of any independent evidence supporting such a reconstruction. Ved. sćacat and Gmc. *sēhwana could perfectly stem from the subjunctive of the root aorist.

7. Some of the formal features of this class recur in the much larger class of verbs with a second stem in *-ē-, with which it shares similarities in meaning.37

35 Cf. Klingenschmitt (1978) on *sęp-je/o-, and Jamison (1982/83) against Klingenschmitt’s view that the Narten present *sęp-/*sęp- predicted by *sęp-je/o- is still directly attested in Vedic.
36 So LIV² 612.
37 I basically follow the views of Jasano off (1978; 2002/03) on the debated “ē-statives”. Here we will focus on verbs that seem to have a different origin from the nucleus of ī-presents (the type Lith. minėti, mini “mention, remember”, OCS minēti, mēni- “think”), and probably have been fully adapted to this class at a relatively late date, to a large extent independently in Baltic and Slavic.
Extension of *-i- (from resegmented 3 pl. *-int° < *-nt°, *-r) through the plural is found in OPr. 1 pl. waidimai, 2 pl. waiditi vs. 2 sg. waiset “know” (cf. OCS 3 pl. vēdēto, inf. vēdēti), and must have been an important factor in the transfer into the class of ū-presents of old perfects like Lith. garēti, gāri, OCS gorēti, gori- (pres. ptcp. gorōšt–) “burn”, OCS polēti, poli- “flame”, bolēti, bol– “be sick”, Lith. galēti, gāli, “be able, can”, and old Narten presents like OCS bēžai, bēži– “run” (ORuss. běči, běgu, OLith. bėgni), velēti, veli– “want, order” (OLith. -velmi, -velt “want, allow”). In many cases evidence pointing to a Balto-Slavic athematic present is still attested in the historical languages.

Whether verbs with a second stem *-e– still displayed ablaut in Balto-Slavic is less clear to me. Evidence of ablaut is practically restricted to a few East Baltic pairs like Lith. veizdēti, veizdi “see” (OLith. veiz(d)mi, OCS vidēti, vidi–, imper. 2/3 sg. viždi) vs. Lith. pa-vydéti, –i “envy”, OLith. pa-niedētas “scorned, humiliated” (Daukša) vs. Latv. nīdēt, –u (and nīst, –stu/-žu) “hate”, 38 or Latv. ziēdēt vs. Lith. žydēti, –i “bloom”.39 I am not certain that the assumption of an old ablauting paradigm is the only possible explanation for these pairs. The vocalism of Lith. žydēti could have been borrowed from the sta–inchoative (pra–)žyti, –sta, –do. A similar explanation could be offered for Latv. nīdēt, –žu/-du, for *niēdēt with the vocalism of the derived sta–present nīst, –stu with which it eventually came to coincide in meaning. Finally, pa-vydēti could be equated with Ved. vidē “is known”, Go. witan, –aiph “watch, observe”, Lat. uideō, –ere “see”, in which case it would continue a different present formation (*yid–ór) from the Narten present *yeid–/*yeid– that is apparently continued in Lith. veizdēti, OCS vidēti.40

8. The verbs we have studied do not belong to a productive class. Many of them show unexpected features in their conjugation. They can thus be taken seriously as potential witnesses of an earlier stage of the Balto-Slavic verb. The prehistory of some of them is uncertain, but a remarkable number have a clear etymology and can be more or less confidently traced back to an Indo-European verbal formation (which is rarely the case when studying the Balto-Slavic verb). Apart from Lith. ieškoti / OCS iskati, all verbs with a

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38 From a Narten present *h₃neēd-ti/*h₃neēd-ŋti (: YAv. nāist “blame”), cf. Tremblay (1999).
40 Cf. Tremblay (1997, 113ff.) for more potential evidence in favor of an Indo-European Narten present of the root *yeid–.
certain etymology seem to derive from an Indo-European athematic verbal formation that has been preserved until fairly recently. The assumption of a small class of Balto-Slavic verbs characterized by a second stem in *-ā-, probably regularly accompanied by zero grade of the root, and a different type of present, usually a Balto-Slavic athematic present with a union vowel *-i- in the plural, seems thus to be based on firm evidence.

This account of verbs like bijóti/bojati or Slavic stópati, which I believe is unavoidable because the evidence for the independence of the present stem is rather clear, raises of course a number of questions. A detailed discussion cannot be reasonably accommodated here. The second stem *-ā- is probably to be related to that of the iteratives in *-ah₂je/o- (Lith. -oti, -oja, OCS -ati, -ajetv), but the way some old perfects and presents acquired a second stem in *-ā- remains to be worked out. To some degree it must have filled a gap in the paradigm. If verbs like bijóti/bojati, miegóti/měžati or ieškóti/iskati correlated with inherited aorists, as many of them surely did, these were either lost (as in the case of bijóti/bojati and ieškóti/iskati) or, when preserved, had come to be part of a different paradigm (as in the case of OCS aor. u-stópe “fell asleep” beside pres. -stópe/-sone-). Whether any type of relationship exists between the second stem in *-ā- of this small group of verbs and that of the Baltic ā-preterit or the Slavic type břrati, bere- “take” is conceivable, but far from assured. In any case they seem to conform different Balto-Slavic verbal classes that are still kept separately in the daughter languages (with the exception of Slavic iskati).

9. The purpose of the preceding sections §6.-8. has been to place žinóti in line with the verbs with which it shares the most obvious morphological similarities. Derivation from a perfect is paralleled by bijóti/bojati and the same origin is possible, although not assured, for other verbs of this class. The *-ā- of the present (singular) *žinā- can now be seen as simply adopted from that of the second stem *žin-ā-, in the same way as *-ā- has been generalized through the present paradigm of bijóti. A major advantage of this proposal is that the aberrant dialectal Latvian 1 pl. zinim, 2 pl. zinīt can now be seen as a regular feature of the class of verbs to which žinóti belongs.

41 To be sure, a somewhat anachronistic *gnh₂-eh₂- would probably have given *žin-ō-. The *-ā- of *žin-ā- is either analogical after other verbs with a second stem in *-ā- or, much more likely, the second stem *žin-ā- was formed at a relatively late date, when laryngeals had already fallen or were not capable of coloring a neighboring *e.
and are to be derived, in the last instance, from the 3 pl. *ǵe-ǵnḥ₃-ᵣ̥. It remains only to offer a possible scenario from Indo-European to the Baltic (and Slavic) languages.

The reconstruction of the present paradigm (< old perfect) inherited by Balto-Slavic is problematic due to the controversy surrounding the status of the *ᵣ-perfects of the type Ved. jajnáu, Lat. (g)nōui, OE cnēow. We should start either from sg. *źnō(−) / pl. *źini− (< 1 sg. *ǵe-ǵnḥ₃-h₂a, 2 sg. *ǵe-ǵnḥ₃-th₂a, 3 sg. *ǵe-ǵnḥ₃-e, pl./du. *ǵe-ǵnḥ₃-s), or from sg. *źnōw(−) / pl. *źini− (< 1 sg. *ǵe-ǵnḥ₃-u, 2 sg. *ǵe-ǵnḥ₃-th₂a, 3 sg. *ǵe-ǵnḥ₃-u, pl./du. *ǵe-ǵnḥ₃-s, vel sim.), depending on one’s position concerning the perfect type Ved. jajnáu. The old root aorist *ǵněh₃-t / *ǵnḥ₃-ěnt is continued directly in Slavic aor. 1 sg. znax₁b, 2/3 sg. zna. From the presents reconstructable to this root (*ǵn- n(é)-h₃-, *ǵnḥ₃-šk̂e/o-, perhaps *ǵněh₃-s-) none seems to have survived.

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42 Hitherto I have been tacitly assuming that the 3 pl. of the perfect in (pre-)Balto-Slavic was *ᵣ rather than any other of the attested variants (*ᵣ, *ᵣs, cf. Jasanoff 2003, 32ff. on its origin). In addition to the advantages *ᵣ presents over, say, *ᵣ in order to explain the Balto-Slavic facts, it is supported by its presence in the most closely related dialects: Indo-Iranian *ᵣ (Ved. -ūr, Av. -arš) and perhaps Germanic (if *ᵣ > *ᵣ stands behind 3 pl. -un, with -u- extended as a union vowel to 1 pl. -um, 2 pl. -ub, 2 du. -uts).

43 See Selde (2001, 1-52), with abundant literature, for a recent, overtly negative discussion centered around Latin. If the existence of Indo-European *ᵣ-perfects for roots ultimae laryngalis is accepted (my own solution has been presented in Villanueva 2002, 111ff.), it is interesting to observe that Lith. stovėti, stovi “stay” and dėvėti, dėvi “wear (clothes)” almost certainly stem from old perfects (: Ved. tashau, daghau), but, differently from žinoti, show extension of o-w- through all the paradigm. The vocalism of stovėti and dėvėti was probably borrowed from the root aorists *stā-t, *dā-e-t at an early date. The circumflex intonation of dėvi can perhaps be explained as due to a regular Balto-Slavic circumflex metatony in monosyllables, as proposed by Rasmussen (1992, 188ff.). This explanation would entail the presence of 1/3 sg. *d(ʰ)ēw (← *d(ʰ)e-)d(ʰ)ow) at some stage of the prehistory of Balto-Slavic. In this case, the acute of stōvi must have been taken from (at-si-)stōi, -ja, -jo “stand up” (so also Kortlandt 1989, 111, with a different explanation of the circumflex of dėvi). The reason why žinoti took a different path from stovėti and dėvėti is probably to be explained as due to the fact that the weak stem of žinoti was *žin(i)−, to which a second stem could be regularly added and that could be perfectly used to rebuild the paradigm, while that of stovėti and dėvėti must have been a much less usable *st−, *d− (and/or perhaps *sta−, *da− or, from the 3rd pl., *sti−, *di−).
in Balto-Slavic. The Slavic present *zna-je- is an obvious innovation that can perhaps have replaced one of the old presents of *gneh₃-s-. ⁴⁴

I suggest that the contrast between Slavic znati, znaje- and Baltic *žin-ā- (pres. *žin(ā)/*-žini-) reflects an original, Balto-Slavic contrast between inchoative “get to know” and stative “know”. In Baltic the stative was generalized, the inchoative value being expressed with preverbs. This seems to be the situation of Old Prussian. Later an inchoative sta-present was formed in East Baltic. In Slavic the inchoative was generalized. The stative meaning “to know” of the Slavic imperfective znati is perhaps due to polarization vis-à-vis the preverbed perfectives (OCS po-znati “recognize”, etc.), which would continue its original value.

When the need was felt to endow the stative *žnō(w)(-)/*žini- with a full paradigm, it acquired a second stem in *-ā-, regularly built to the zero grade of the root: *žin-ā- (the old pluperfect *gē-gnōh₃-t/*gē-gnēh₃-řs, vel sim., ⁴⁵ was lost in Balto-Slavic, and the old root aorist was part of a different paradigm). Similar processes must stand at the origin of the second stem in *-ē- and *-ā- usually pared with most old perfects that have been preserved in Balto-Slavic, but the reasons why either *-ē- or *-ā- were selected cannot now be recovered.

A paradigm pres. *žnō(w)(-)/*žini- : inf. and aor. *žin-ā- was of course too irregular to survive and the weak stem *žin- was generalized. It is possible that the present was first transformed, perhaps already in Balto-Slavic times, into an athematic paradigm (pre-)Baltic 1 sg. *žin-m(a)i, 2 sg. *žin-s(a)i, 3 g. *žin-ti, 1 pl. *žin-i-mēž, 2 pl. *žin-i-tēž, and that only later did the singular adopt *-ā- from the second stem, but this can of course not be proved. If this assumption is correct, the early loss of the athematic present inflexion of žinōti and bijōti (in contrast with the survival down into historical times of the athematic present of miegōti, raudoći or giedōti) was in part perhaps due to phonetic reasons: in Old Lithuanian athematic presents to roots not ending in a stop are very rare, and those ending in ₀d- (like raudoći and giedōti) clearly predominate.

⁴⁴ In this connection it is interesting to observe that Jasanoff (1988, 238) considers Germanic *knē-ja- “know, perceive” (OE cnāwan, OHG ir-knāen, ON kná) a replacement of *gneh₃-s-. See Harðарson (1993, 79ff.) for a different account of *knē-ja- (and ON kná).

⁴⁵ I am following Jasanoff (2003, 34ff.) in the formal reconstruction of the pluperfect, but this is immaterial for our present discussion.
LIE. žinóti

Santrauka

Lie. žinóti, žino (la. zināt, zina, pr. po-, er-sinnat, -sinnitus) paprastai kildinamas iš ide. prezenso su nosiniu intarpū *ŋ-né-h₃-ti / *ŋ-n-h₃-enti (s. i. jānāti, toch. A knānas, s. air. ad-gnin). Tačiau šis aiškinimas susiduria su dviem svarbiais sunkumais: 1) bl. ka- 
mienas *žinā- (< *žin-nā-) vietoj laukinto *žinō-, 2) latvių tarmių daugiskaitos formos 1 
dgs. žinim, 2 dgs. zinit. Nors būta įvairių bandymų paaškinti šias dvi problemas, jų ne- 
galima laikyti išitimamais arba jie nebeaititinka indoeuropiečių morfologinės rekonstruk- 
cijos ir baltų kalbų istorinės fonologijos bei morfologijos dabartinių žinių. Kiti bandymai 
aiškinti lie. žinóti ir t. t. ne iš ide. intarpinio prezenso taip pat yra neįtikinami.

Lie. žinóti čia siūloma kildinti iš ide. perfekto *ge-gnōh₃-e (arba *ge-gnōh₃-uy) / 
*ge-gnōh₃-j (s. i. jajnāu ir kt.). Praktiškai identiška raida pastebima veiksmazodyje lie. 
bijōti, bijo (la. bīātiās, pr. biātweī). Jo slavų atitikimu bojati, boji- se neabejotinai kilęs iš 
perfekto *b'ē-b'ōiH-e (s. i. bibhāya, s. v. a. bibēn) ir iš principo lie. bijōti turėtų būti 
tos pačios kilmės. Siūloma rekonstruoti bendrą baltų–slavų šių veiksmazodžių paradig 
mandr. ir aor. *bij-ā-, prez. *baj-m(a)i / *baj-i-me arba *bij-i-me. Lie. žinóti ir lie. bijōti / 
s. sl. bojati sė priklausė negausiai baltų–slavų veiksmazodžių grupei, kuriai budingi šie 
bruožai: 1) bendraties ir aoristō kamienas *-ā-, 2) nepriklausomas, paprastai ateimatinis 
prezensus su jungiamuoju balsiu *-i- daugiskaitoje (kilęs iš 3 dgs. *-int(i) < *-nt(i) arba 
*-t), 3) balsių kaita, veikiausiai su muliniu laipsniu kaip bendraties kamieno charakteris- 
tika. Kiti veiksmazodžiai, kurie galėjo priklausyti šiai grupei, yra lie. miegōti / sl. mūžāti, 
lie. ieškōti / s. sl. iskāti, lie. raudōti, giedōti, sāugoti, sērgēti (la. sārgāt), kabōti, karōti, s. sl. 
svāti, bažn. sl. s.-kr. svāti. Dauguma jų išsaugojo pėdsakų iš postuluojamos baltų–slavų 
paradigmos.

Baltų–slavų epochai siūloma rekonstruoti opoziciją tarp inchoatyvinio *žnō-tēi, 
*žnō-je/a-/ > s. sl. znati, znaje- (iš ide. atem. aer. *gnēh₃-t) ir statyvinio *žin-ā-tēi, 
*žin-m(a)i / *žin-i-me (iš ide. perf. *ge-gnōh₃ / *ge-ge-ģnōh₃- > *žnō(w)(-) / *žini-; šio 
veiksmazodžio prezensus baltų ir slavų kalbose neišliko) --> bl. *žin-ā-, *žinā- / *žini- (iš 
kur la. trm. zinu / zinim ir, su apibendrintu *-ā- kamienu, lie. žinaū / žiname).

REFERENCES

Babik, Zbigniew 2004, Morphonomy of the Slavic present tense form *j̥mamъ, 
Rocznik Slawistyczny 54, 65–85.

Bammesberger, Alfred 1988, Die baltische Präzensbildungen bei Wurzeln auf Langvo- 
kal, Baltistica 24, 112–115.

Bammesberger, Alfred 1993, Zur Vorgeschichte von litauisch žinóti, Linguistica Bal- 
tica 2, 83–90.


Endzelins, Jānis 1933, Sikumi. CXXV, Filologu Biedrības Raksti 13, 113.

Endzelins, Jānis 1938, Latviešu valodas skaņas un formas, Rīga: Latvijas Universitāte.


Endzelins, Jānis 1948, Baltu valodu skaņas un formas, Rīga: Latvijas valsts izdevniecība.

Endzelins, Jānis 1951, Latviešu valodas gramatika, Rīga: Latvijas valsts izdevniecība.


Fraenkel, Ernst 1950b, Zum baltischen und slavischen Verbum, ZslPh 20, 236–320.


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


Villanueva Svensson, Miguel forthcoming, Indo-European Middle Root Aorists in Anatolian, Die Sprache.


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