Frederik KORTLANDT
Leiden University

PROTO-BALTIC?

Abstract. There is little or no evidence for a period of common West and East Baltic innovations after the period of common Balto-Slavic developments before the separation of Slavic from the Baltic languages. The terms "Proto-Baltic" and "Proto-Balto-Slavic" refer to the same thing, and Slavic may alternatively be called "South Baltic". The opposite view is taken by Miguel Villanueva Svensson (2014) and Eugen Hill (2016). Here I specify the differences which underlie the disagreement.
Keywords: Proto-Baltic; Slavic.

0. On various occasions I have argued that there is little or no evidence for a period of common West and East Baltic innovations after the period of common Balto-Slavic developments before the separation of Slavic from the Baltic languages (e.g. Kortlandt 1977; 2008). If this is correct, the terms "Proto-Baltic" and "Proto-Balto-Slavic" refer to the same thing, and Slavic may alternatively be called "South Baltic". The opposite view is taken by Miguel Villanueva Svensson (2014) and Eugen Hill (2016). It is therefore appropriate to specify the differences which underlie the disagreement. Here I shall follow the order of Villanueva's exposition, omitting the specific Baltic vocabulary items.

1. According to Villanueva (2014, 173), the "most serious problem for Baltic unity is the apparent existence of non-trivial isoglosses between East Baltic and Slavic (e.g. thematic genitive singular, "nine", "third", etc.)". He opposes gen. sg. Lith. *vil̃ko* and OCS *vlъka* < *-ãd* to OPr. *deiwas* (2014, 163). In fact, the ending Lith. *-o*, Slavic *-a* represents *-ōd* and can be identified with the Latin ablative ending *-ōd*, not *-ād*, for which there is no evidence whatever. The Lithuanian reflex is *-o* because the ending was unstressed in all accent classes (cf. Kortlandt 2009, 6, 46). Prussian added an analogical *-s* to the Balto-Slavic ending in accordance with the other flexion types, all of

which had a genitive in –s (cf. Vaillant 1958, 30; Kortlandt 2009, 192). The original ending was preserved in the Old Prussian proverb *Deues does dantes, Deues does geitka* 'God give teeth, God give bread' (cf. Sjöberg 1969) and in the Basel epigram *nykoyte pēnega doyte* 'you do not want to give money', where an emendation to –*an* or –*as* is unsatisfactory (cf. Kortlandt 2009, 215f.). There is no ancient isogloss between East Baltic and Slavic here.

The words for 'nine' and 'third' indeed support the view that Balto–Slavic split into three identifiable branches, with East Baltic as an intermediate dialect between West Baltic and Slavic. OPr. *newīnts* 'ninth' shows that the substitution of *de-* for *ne-* in Lith. *deviñtas* and OCS *devętь* belongs to the dialectal Balto–Slavic period. The same holds for the subsequent development of **eu* to **iou* before consonants in East Baltic and Slavic (cf. Kortlandt 2009, 45f.; Derksen 2010). Similarly, OPr. *tīrts* 'third', acc. *tīrtian, tirtien*, Vedic *tṛtī́yas* for earlier **triyo-*, is archaic in comparison with Lith. *trẽčias* and OCS *tretii*, which have *tre-* from **treies* 'three'. Another common development of East Baltic and Slavic not shared by West Baltic is the elimination of –*s-* in the pronominal dat. sg. and loc. sg. forms Lith. *tãmui, tamè, tái, tojè*, OCS *tomu, tomь, toi*, OPr. *stesmu, stessiei*, Vedic *tásmai, tásmin, tásyai, tásyām* (cf. Kortlandt 2009, 139f.).

2. In the verbal system, Villanueva adduces the generalization of the 3rd sg. form in the plural and dual, the generalization of the thematic vowel **-o-*, and the 3rd person zero endings (2014, 166–168). In fact, I have argued (Kortlandt 2009, 277–280) that the difference between 3rd sg. and 3rd pl. forms was preserved in Old Prussian

3rd sg. *tu(r)rei* 9× beside *turri* 18×, also
2nd sg. *turei* 6× beside *turri* 14×, versus
3rd pl. *turri* 10× beside *turei* 1×, also
1st pl. *turrimai* 20× and 2nd pl. *turriti* 3×,

with generalization of the plural form taking place before our eyes, and similarly in the *ina*-flexion

3rd sg. –*inai* 4×, –*inne(i)* 2× beside –*i(n)na* 13×, also
2nd sg. –*inai* 1×, –*inei* 1×, versus
3rd pl. –*i(n)na* 5× beside –*inai* 1×, and
1st pl. –*innimai* 6×,

again with generalization of the plural form. In East Baltic and Slavic, the singular and plural forms gave rise to different paradigms, e.g. causatives, iteratives and denominatives in Lith. -*inti*, Latvian -*inât*, which are closely related to the verbs in Lith. -*yti*, Latvian -*ît* (cf. S t a n g 1966, 371; K o r t l a n d t 2009, 174). These verbs evidently represent a single East Baltic paradigm with 3rd sg. *-*inâ(ti)* preserved in Latvian and 3rd pl. *-*in(ti)* thematicized in Lithuanian. Both forms are apparently built on the 3rd pl. form of a Balto-Slavic paradigm with 3rd sg. *-*eiti* and 3rd pl. *-*inti* reflected in Old Prussian 3rd sg. *turei*, 3rd pl. *turri*, remodeled on the analogy of the Vedic type *jānā́ti*, *jānánti* 'know'.

The existence of a Balto-Slavic paradigm with 3rd sg. *-*eiti* and 3rd pl. *-*inti* immediately explains the difference between the zero grade in the East Baltic *i*-present and the full grade in the Slavic *i*-present, which has a long -*ī*- < *-*ei*-. Moreover, the *ā*-present of East Baltic verbs in -*īti* corresponds to such Serbo-Croatian verbs as *hódati*, *nósati*, *vódati*, *vózati* beside *hòditi*, *nòsiti*, *vòditi*, *vòziti*, also Latvian *vadât* 'lead about' beside *vadît* 'lead'. I have argued (K o r t l a n d t 2009, 175) that the underlying Balto-Slavic paradigm with 3rd sg. *-*âti* and 3rd pl. *-*inti* was built on the model of *stastâti*, *stastinti* 'put' from Proto-Indo-European *stisteH₂ti*, *stestH₂nti*, reflected in Lith. *statýti*, OPr. *preistattinnimai* 'we put before', and Latvian *stâstît* 'to tell' (cf. English *to state*). My theory receives strong support from the existence of a class of iterative verbs with a *stā*-present and an *o*-grade root vowel: "Da die *stā*-Verba vielfach klare Iterativa sind und da sie grundsätzlich dieselbe Ablautstufe aufweisen, wie die primitiven Iterativa auf -*īti*, sind sie kaum unabhängig von diesen zu erklären" (S t a n g 1966, 327). It also offers an explanation for the rise of causative verbs in Lith. -*dyti*, -*dinti*, Latv. -*dît*, -*dinât*: these verbs apparently adopted the -*d*- of 3rd pl. *dedinti*, *dōdinti* and the *ā*-flexion of *stastāti*. As a result, -*d*- could be used as a hiatus filler in these classes, cf. Lith. *baidýti* 'frighten', where the circumflex of *baĩdo* points to loss of the root-final laryngeal and addition of -*d*- from *dedinti*, but Latv. *baĩdît*, where the stretched tone cannot have been taken from *bîtiês* 'fear' and may reflect the acute of *dōdinti* added to the same form of the root. The original formation was preserved in OPr. *pobaiint*. The presence of the acute tone in *dōdinti* and its absence from *dedinti* account for the coexistence of *d*-causatives with and without metatony, e.g. Lith. *gim̃do*, *gìmdo* 'gives birth', *ram̃do*, *rámdo* 'soothes' (cf. B ū g a 1924, 274). The *ā*-present of *ī*-verbs is

reflected in Old Prussian *lāiku*, *laikūt* 'hold', *perbānda* 'tempts', *perbandāsnan* 'temptation', *maysotan* 'mixed', Lith. *laikýti*, *bandýti*, *maišýti*.

3. V i l l a n u e v a follows Cowgill's view that the personal endings of the thematic present did not differ from those of the athematic present with the exception of the 1st sg. ending (2014, 167). A comparison of our reconstructions yields the following picture:

	PIE/MVS	**PIE/FK**	**BSl./FK**	**OPr./FK**
1st sg.	*-oH₂*	*-oH*	*-oʔ*	*-a*
2nd sg.	*-esi*	*-eH₁i*	*-eʔi*	*-asi*
3rd sg.	*-eti*	*-e*	*-e*	*-a*
1st pl.	*-omos*	*-omHom*	*-omun*	*-amai*
2nd pl.	*-ete*	*-etH₁e*	*-ete*	*-ati*
3rd pl.	*-onti*	*-o*	*-o*	*-a*

In Indo-Iranian, these endings were better preserved in the subjunctive than in the indicative (cf. B e e k e s 1981), and the same holds for Armenian. Cowgill's reconstruction does not explain the following forms, for which he needs to introduce additional hypotheses (cf. K o r t l a n d t 2015):

2nd sg. Vedic *-as* (with secondary *-s*), Greek *-εις* (with added *-s*), Umbrian *seste* 'set up', Old Irish *-bir*, *biri*, Tocharian AB *-t* (with enclitic **tu* after a zero ending), Lith. *-ì*, *-íe-*, OPr. *-s-ei*, Slavic *-s-i*.

3rd sg. Vedic *-at* (with added *-t*), Gathic *-at̯* (idem), Greek *-ει* (with added *-i*), Old Latin future *esed* 'will be' (with added *-d*), Umbrian *heri* 'wants' (with apocope), Old Irish *-beir*, relative *beres* (with enclitic **so*), Tocharian A *-ṣ*, B *-m̥* (enclitics after a zero ending), Old Russian and Ukrainian *-e*, Baltic *-a* < **-e* with retraction after **j*.

1st pl. Vedic *-āma* (with loss of the final nasal), Gathic *-āma* (idem), Armenian *-cʻukʻ* (with added **-s* from the athematic ending), Greek *-oμεν* (with *-e-* from the athematic ending *-μες*), Latin *-umus* (with **-s* from the athematic ending), Old Irish *-beram*, relative *bermae* < **-omos*, Slavic *-emъ* with umlaut of **-o-* after **j*.

3rd pl. Vedic *-an* (with added **-nt*), Gathic *-ən* (idem), Old Irish *-berat*, relative *bertae* < **-ont* (idem), Tocharian B *-em̥* (idem), A *-e* < **-o* before an umlauting clitic, Baltic *-a*, Slavic *-ǫtъ* (with added **-nti* from the athematic present).

Following Cowgill, Villanueva disregards the evidence from Indo-Iranian, Greek, Italic, Germanic, Slavic, Armenian and Tocharian and invokes an irregular loss of final *-i in order to explain the Baltic and Celtic forms (cf. Kortlandt 2015, 9–14). Following Schmalstieg (1958), he points out correctly that *j was lost between consonants and front vowels in Baltic, after which the thematic vowel -a- < *-o- was generalized in the paradigm. This was a common development of West and East Baltic that yielded the merger of the thematic endings 3rd sg. *-e and 3rd pl. *-o. Like the development of the words for 'nine' and 'third' in East Baltic and Slavic, it can be dated to the dialectal Balto-Slavic period.

Villanueva unduly posits a final *-i that was allegedly apocopated in Proto-Baltic times in the preterit Lith. nẽšė and the future Lith. duõs, which originally had secondary endings, 3rd sg. *-t, not *-ti (cf. Kortlandt 2009, 187; 2014, 219). The forms 1st pl. dúosme and 2nd pl. dúoste are more archaic than dúosime, dúosite, Latvian duôsim, duôsit (cf. Kortlandt 2009, 16). The latter were based on the 3rd pl. form *duôsin(t), which apparently survived into the East Baltic period. The pronominal inst. sg. form OCS fem. tojǫ may be compared with Vedic loc. sg. tásyām, like OCS masc. těmь with Vedic tásmin. Contrary to Villanueva's statement, OCS 1st sg. berǫ cannot be derived from *-ōmi because the accent was retracted to the initial syllable in this form of the paradigm (cf. also Kortlandt 2009, 155f.).

4. Villanueva claims that the Baltic ē-preterit and nominal ē-stems lack cognates in other Indo-European languages (2014, 169f.). This is a big mistake (cf. Meillet 1906; Pedersen 1926; Vaillant 1966, 398–401; Schrijver 1991, 366–390; Kortlandt 2007, 81–85; 2009, 129–135, 185–187). Deverbal ē-stems are frequent in Latin, e.g. caedēs, sēdēs, clādēs, vātēs, compāgēs, ambāgēs, prōlēs, subōlēs, struēs, luēs. Both sigmatic and asigmatic nominatives are found in Vedic compounds of root nouns, e.g. śraddhā́ 'trust' < *-dʰē, śraddhā́s 'trustful', Avestan mazdå < *-dās, cf. Old English wōð 'song' and wōd 'mad' corresponding to Welsh gwawd 'song' and Irish fáith 'poet' (= Latin vātēs), reflecting a proterodynamic and a hysterodynamic flexion of the same word. Baltic compounds with *-dʰē are frequent, e.g. Lith. arklìdė, avìdė, alùdė, pelùdė, also žvaigždė̃ 'star', OCS zvězda, OPr. umnode 'bakehouse', with the circumflex tone of a monosyllable. Other ē-stems are Lith. žvãkė, meñtė, gìrė, to be compared with Latin facēs, Vedic mánthās, girís, OCS gora (cf. Pedersen 1926, 60–67). It appears that ē-stems became

productive in Balto-Slavic by the creation of a nom. sg. form in *-ē on the basis of the oblique cases of consonant stems, e.g. Lith. *žẽmė*, *ùpė*, *sáulė*, *gìlė*, *mùsė*, *pelė̃*, *gérvė*, *šlovė̃*, OPr. *semmē*, *ape*, *saule*, *gile*, *muso*, *peles*, *gerwe*. In Slavic, *ē*-stems are mostly continued as *ā*-stems, e.g. OCS *zvězda*, *gora*. Note that OCS *zemlja* is an original *ē*-stem, not a *jā*-stem, because it belongs to accent paradigm (b) in Old Russian, Kajkavian and Old Slovene (cf. Kortlandt 2011, 64).

In his brilliant studies of the Elbing Vocabulary (1973; 1974), Jules Levin has shown that the nom. sg. ending of the proterodynamic and hysterodynamic *iH*-stems is *–y/i* /ī/ and *–e* /ē/, respectively, e.g. *sansy* 'goose' versus *mealde* 'lightning', Lith. *patì* < *-iʔ vs. *vilkė* < *-iʔē, OCS *bogynji* vs. *mlъnii*. The accent was retracted in the hysterodynamic paradigm, yielding metatony in the preceding syllable and loss of the prevocalic *i at the end of the East Baltic period (cf. Kortlandt 2009, 7). The reflexes *-ē < *-iē in East Baltic and *–ii* < *-iē in Slavic presuppose a Balto-Slavic nom. sg. form in *-iʔē, with full grade *-ē from the simple *ē*-stems (cf. Pedersen 1926, 58; Schrijver 1991, 387) and raising of the final *-ē to *-ī in Early Slavic, as in OCS *mati*, Lith. *mótė* (cf. Kortlandt 2011, 162). The nom. sg. form evidently adopted the circumflex ending of the earlier *ē*-stems, ultimately from monosyllabic *-dʰē(s). At that time, the hysterodynamic paradigm still had gen. sg. *-iʔes and acc. sg. *-eiʔm, preserved in OPr. *warein* (2×) 'power', with the same vocalism as in OCS acc. sg. *svekrovь* 'mother-in-law' < *-euHm (cf. Rozwadowski 1914, 14–18; Kortlandt 2009, 132–134). This is the origin of the hysterodynamic feminine adjectives in *-ė*, e.g. Lith. *dìdelė*, *gerèsnė*, *vidurìnė*, *auksìnė*, *mažùtė*, as opposed to the proterodynamic feminine paradigm of the *u*-stems, e.g. *lýgi*, *brangì*, *platì*. Proterodynamic feminines were originally derived from athematic stems, e.g. OPr. *sansy*, Lith. *patì*, and hysterodynamic feminines from thematic stems, e.g. *vilkė* from *vil̃kas* (cf. Fellner 2014, 70f.; Kortlandt 2017). The retraction of the accent from a prevocalic *i at the end of the East Baltic period did not yield a long vowel in the preceding syllable, as Larsson (2004) and Villanueva (2014, 170) would have it. They have not refuted Derksen's argumentation (1996, 38, 52, 124f.). In particular, the absence of lengthening in *ragãnius*, *vandẽnis*, *auksìnis*, *vasãris*, *beuodẽgis*, *bemotẽris*, *drapãnis* shows that it was not a phonetic development. There is no evidence for a retraction of the accent in Prussian, where the *i was never lost, cf. acc. sg. I *tirtin*, II *tirtien*,

E *tīrtian* 'third', with restoration of the ending *-an*. It is clear that original root nouns are continued not only as *i*-stems (thus L a r s s o n 2004, 314) but also as *o*- and *ā*-stems (cf. K o r t l a n d t 2009, 55) and as *ē*-stems, as has been pointed out above.

5. Contrary to V i l l a n u e v a's assertions (2014, 169f.), the *ē*-preterit Lith. *vêdė*, OPr. *weddē* 'led' cannot be separated from the OCS imperfect *vedě-aše* (e.g. K o r t l a n d t 2009, 186f.). The long root vowel of *ē*-preterits such as Lith. *lė̃kė* 'flew', *srė̃bė* 'sipped', *bė̃rė* 'strewed', *pė̃rė* 'thrashed' originated in the sigmatic aorist, which was generally replaced by the *ē*-preterit (cf. K o r t l a n d t 2009, 52f., 85). Herman K ø l l n has shown that Slavic root verbs originally had a sigmatic aorist if they were both transitive and non-terminative but a thematic aorist if they were either intransitive or terminative, or both (1961, 269). The type of Lith. *tekéti*, *tḗka* 'flow' belongs to a category of intransitive verbs denoting non-terminative dynamic processes that had an *ē*-preterit going back to Balto-Slavic times (cf. K o r t l a n d t 2009, 186). The *ē*-preterit was evidently taken from the Indo-European type of stative verbs with an *i*-present denoting a state of being, e.g. Lith. *budéti* 'be awake', *judéti* 'be in movement', OCS *mьněti* 'be in thought', *dъržati* 'be in control', Vedic *búdhya-*, *yúdhya-*, *mánya-*, *dŕhya-*, which were semantically close enough to supply a new imperfect to present stems of non-terminative intransitive verbs when the earlier imperfect developed into an aorist. At the same time, transitive verbs denoting terminative dynamic actions such as OCS *bere-* 'gather', *žene-* < **gene-* 'hunt', *ište-* < **iske-* 'search', *mete-* 'throw', *tъče-* < **tъke-* 'weave', *kove-* 'forge', *zove-* 'call' developed an *ā*-preterit (cf. K ø l l n 1961, 275), which was probably taken from an Indo-European type of verbs denoting determinate movement (cf. K o r t l a n d t 2007, 71, 153). This was clearly a Balto-Slavic innovation because the East Baltic transitive root verbs with a thematic present and an *ā*-preterit belong to the same semantic class, e.g. Lith. *reñka*, *riñko* 'gather', *siùva*, *siùvo* 'sew', *sùka*, *sùko* 'twist' (cf. S t a n g 1966, 385). Later the *ā*-preterit replaced the thematic aorist in East Baltic, where it was subsequently generalized as the preterit of intransitive verbs par excellence. On the other hand, the sigmatic aorist of transitive root verbs was replaced by an *ē*-preterit, which then became the characteristic preterit of transitive verbs in East Baltic. Thus, I agree with S t a n g that "sowohl der intransitive Charakter des *ā*-Prät. als der transitive Charakter des *ē*-Prät. sekundär ist" (1966, 388). In Prussian we find the intransitive *ē*-preterit

in *ismigē* 'entschlief', OCS *mьžati* < **migē-*, and the transitive *ē*-preterit in *weddē* 'brachte' and *pertraūki* 'verschloss', Lith. *vēdē*, *tráukė*. The transitive *ā*-preterit was largely generalized in Prussian, as is clear from I *bela*, II *byla*, E *billā* 'sprach', I, II *prowela* 'verriet', I *lima*, II *lymu* 'brach', E *poglabū* 'herzte', and especially *endeirā* 'sah an' and *teikū* 'schuf' because these have the *e*-grade root vowel of the present tense, as distinct from the zero grade root vowel in the infinitives *endyrītwei* 'ansehen' and *tickint* 'machen'. Note that Villanueva's derivation of Lith. *lẽkė* from **lekā* by a "curious adoption of **-i-*" from the present *lēkia* is impossible because (1) there is no evidence for a form **lekā*, (2) the **-i-* was not stressed and there was no retraction of the accent, so (3) the lengthening of the root vowel remains unexplained, and (4) the derivation of an *ā*-preterit from a *ja*-present would yield a form in *-jo*, as in *jójo* 'rode'.

6. Eugen Hill proposes two Balto-Slavic developments that were not shared by Slavic, viz. shortening of unstressed Proto-Balto-Slavic **ĩ* and contraction in Proto-Balto-Slavic **ia* and **iā*. He assumes Balto-Slavic **ĩ* < **eie* in the dat. sg. ending **-eiei* and in the *i*-present stem **-eie-* (Hill 2016, 215–217). In fact, the short dat. sg. ending *-i* in Lithuanian dialects may be the original loc. sg. ending of the consonant stems while the corresponding long ending *-ei* may be the result of haplology. For the Balto-Slavic *i*-presents see above. It is unfortunate that Hill refers to Andersen and Jasanoff (2016, 216f.) because these authors have completely lost track of the data (cf. Kortlandt 2016; 2007, 144–146; 2009, 81–86; 2010, 337–339). The Balto-Slavic retraction of the stress from open medial syllables to the preceding syllable, which Hill wrongly attributes to Jasanoff (2016, 217), was actually proposed by Saussure (1896) and Pedersen (1933) and discussed throughout the years by all serious authors (cf. Collinge 1985, 147f.; Olander 2009, 17–23 and *passim*; Kortlandt 2009, 103–108 and *passim*; 2010, 337–357; 2011, 159–166 and *passim*). For the retraction of the accent from a prevocalic **i* and the alleged contraction with a following vowel (Hill 2016, 222f.) see above. Note that the long *-ī-* in Lith. *ožỹs* 'he-goat' and *lokỹs* 'he-bear' is recent in view of Estonian *takjas* 'burdock' from Lith. *dagỹs*, Latvian *dadzis*. There was no Proto-Baltic shortening of unstressed **ĩ* and no Proto-Baltic contraction of prevocalic **i* with a following vowel.

BALTŲ PROKALBĖ?

Santrauka

Nėra beveik jokių įrodymų, kad būta bendrų vakarų ir rytų baltų kalbinių inovacijų laikotarpio, trukusio vėliau už bendrų baltų–slavų pakitimų laikotarpį prieš slavų kalboms atsiskiriant nuo baltų kalbų. Terminai „baltų prokalbė" ir „baltų-slavų prokalbė" žymi tą patį dalyką, o slavų kalbos gali būti vadinamos ir „pietų baltų" kalbomis. Priešingą nuomonę yra išreiškę Miguelis Villanueva Svenssonas (2014) ir Eugenas Hillas (2016). Straipsnyje išryškinami šį nesutarimą lemiantys skirtumai.

REFERENCES

Beekes, Robert Stephen Paul 1981, The subjunctive endings of Indo-Iranian, *Indo-Iranian Journal* 23, 21–27.

Būga, Kazimieras 1924, Die Metatonie im Litauischen und Lettischen, *Zeitschrift für vergleichende Sprachforschung* 52, 250–302.

Collinge, Neville Edgar 1985, *The laws of Indo-European*, Amsterdam: John Benjamins.

Derksen, Rick 1996, *Metatony in Baltic* (= *Leiden Studies in Indo-European* 6), Amsterdam: Rodopi.

Derksen, Rick 2010, The development of PIE **eu* in Baltic and Slavic, in Elena Stadnik-Holzer, Georg Holzer (eds.), *Sprache und Leben der frühmittelalterlichen Slaven. Festschrift für Radoslav Katičić zum 80. Geburtstag*, Frankfurt am Main, Berlin, Bern, Bruxelles, New York, Oxford, Wien: Peter Lang, 37–41.

Fellner, Hannes Alexander 2014, Das Femininum der thematischen Adjektiva im Tocharischen, in Norbert Oettinger, Thomas Steer (eds.), *Das Nomen im Indogermanischen*, Wiesbaden: Reichert, 65–77.

Hill, Eugen 2016, Phonological evidence for a Proto-Baltic stage in the evolution of East and West Baltic, *International Journal of Diachronic Linguistics and Linguistic Reconstruction* 13, 205–232.

Kølln, Herman 1961, Die *e/o*-Verba im Slavischen, *Scando-Slavica* 7, 260–285.

Kortlandt, Frederik 1977, Historical laws of Baltic accentuation, *Baltistica* 13(2), 319–330.

Kortlandt, Frederik 2007, *Italo-Celtic origins and prehistoric development of the Irish language* (= *Leiden Studies in Indo-European* 14), Amsterdam: Rodopi.

Kortlandt, Frederik 2008, Balto-Slavic phonological developments, *Baltistica* 43(1), 5–15.

Kortlandt, Frederik 2009, *Baltica & Balto-Slavica* (= *Leiden Studies in Indo-European* 16), Amsterdam: Rodopi.

Kortlandt, Frederik 2010, *Studies in Germanic, Indo-European and Indo-Uralic* (= *Leiden Studies in Indo-European* 17), Amsterdam: Rodopi.

Kortlandt, Frederik 2011, *Selected writings on Slavic and general linguistics* (= *Studies in Slavic and General Linguistics* 39), Amsterdam: Rodopi.

Kortlandt, Frederik 2014, Metatony in monosyllables, *Baltistica* 49(2), 217–224.

Kortlandt, Frederik 2015, Thematic and athematic present endings in Balto-Slavic and Indo-European, *Baltistica* 50(1), 5–17.

Kortlandt, Frederik 2016, Slavic *i*-verbs, imperfect, and *jā*-stem nouns, *Rasprave Instituta za hrvatski jezik i jezikoslovlje* 42(1), 75–81.

Kortlandt, Frederik 2017, On the origin of grammatical gender, *Tocharian and Indo-European Studies* 18, 95–104.

Larsson, Jenny Helena 2004, Metatony and length in Baltic, in Adam Hyllested, Anders Richardt Jørgensen, Jenny Helena Larsson, Thomas Olander (eds.), *Per aspera ad asteriscos: Studia Indogermanica in honorem Jens Elmegård Rasmussen sexagenarii Idibus Martiis anno MMIV*, Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, 305–322.

Levin, Jules Fred 1973, *-jā*-stems and *-ē*-stems in the Elbing Vocabulary, in Arvids Ziedonis, Jaan Puhvel, Rimvydas Šilbajoris, Mardi Valgemae (eds.), *Baltic literature and linguistics*, Columbus: Ohio State University, 189–196.

Levin, Jules Fred 1974, *The Slavic element in the Old Prussian Elbing Vocabulary*, Berkeley: University of California Press.

Meillet, Antoine 1906, Observations sur le verbe latin, *Mémoires de la Société de Linguistique de Paris* 13, 350–375.

Olander, Thomas 2009, *Balto-Slavic accentual mobility*, Berlin: Mouton de Gruyter.

Pedersen, Holger 1926, *La cinquième déclinaison latine*, København: Høst & Søn.

Pedersen, Holger 1933, *Études lituaniennes*, København: Levin & Munksgaard.

Rozwadowski, Jan 1914, Przyczynki do historycznej fonetyki języków słowiańskich, *Rocznik Slawistyczny* 7, 9–21.

de Saussure, Ferdinand 1896, Accentuation lituanienne, *Indogermanische Forschungen: Anzeiger* 6, 157–166.

Schmalstieg, William R. 1958, The thematic vowel in Baltic, *Lingua* 7, 428–432.

Schrijver, Peter 1991, *The reflexes of the Proto-Indo-European laryngeals in Latin* (= *Leiden Studies in Indo-European* 2), Amsterdam: Rodopi.

Sjöberg, Anders 1969, Ob odnoj drevneprusskoj poslovice, *Scando-Slavica* 15, 275–276.

Stang, Christian Schweigaard 1966, *Vergleichende Grammatik der baltischen Sprachen*, Oslo: Universitetsforlaget.

Vaillant, André 1958, *Grammaire comparée des langues slaves* 2: *Morphologie*, Lyon: IAC.

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

Villanueva Svensson, Miguel 2014, On the relationship between West Baltic and East Baltic, in Tatjana Civjan, Artūras Judžentis, Marija Zavjalova (eds.), *Baltai ir slavai: Dvasinių kultūrų sankirtos. Tarptautinės mokslo konferencijos, skirtos akademikui Vladimirui Toporovui pagerbti, straipsnių rinkinys*, Vilnius: Versmė, 162–176.

Frederik KORTLANDT
Cobetstraat 24
NL-2313 KC Leiden
The Netherlands
[*f.kortlandt@hum.leidenuniv.nl*]