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ON METHOD

Abstract. The basis of linguistic reconstruction is the comparative method, which starts from the assumption that there is “a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident”, implying the existence of a common source (thus Sir William Jones in 1786). It follows that there must be a possible sequence of developments from the reconstructed system to the attested data. These developments must have been either phonetically regular or analogical. The latter type of change requires a model and a motivation. A theory which does not account for the data in terms of sound laws and well-motivated analogical changes is not a linguistic reconstruction but philosophical speculation.

The pre-laryngealist idea that any Proto-Indo-European long vowel became acute in Balto-Slavic is a typical example of philosophical speculation contradicted by the comparative evidence. Other examples are spontaneous glottalization (Jasanoff’s “acute assignment”, unattested anywhere in the world), Jasanoff’s trimoraic long vowels, Eichner’s law, Osthoff’s law, and Szemerényi’s law, which is an instance of circular reasoning. The Balto-Slavic acute continues the Proto-Indo-European laryngeals and the glottalic feature of the traditional Proto-Indo-European “unaspirated voiced” obstruents (Winter’s law). My reconstruction of Proto-Indo-European glottalic obstruents is based on direct evidence from Indo-Iranian, Armenian, Baltic and Germanic and indirect evidence from Indo-Iranian, Greek, Latin and Slavic.

Keywords: Balto-Slavic; comparative method; historical phonology; historical accentology; long vowels; monosyllabic circumflexion; acute; circumflex.

The basis of linguistic reconstruction is the comparative method, which starts from the assumption that there is “a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident”, implying the existence of a common source (thus Sir William Jones in 1786, cf. Beekes 2011, 13). It follows that there must be a possible sequence of developments from the reconstructed system to the

attested data. These developments must have been either phonetically regular or analogical (cf. Beekes 2011, 55-82). The latter type of change requires a model and a motivation. A theory which does not account for the data in terms of sound laws and well-motivated analogical changes is not a linguistic reconstruction but philosophical speculation.

In her dissertation, Yoko Yamazaki discusses four categories of “monosyllabic circumflexion” in Lithuanian (2016, 25f.):

- I. 3rd person future forms of monosyllabic stems: *šōks* – *šōkti* ‘to jump’, *vỹs* – *vỹti* ‘to drive’, etc.
- II. reflexes of PIE root nouns: Latvian *gūovs* ‘cow’ < **g^wóus* ← acc.sg. **g^wóm*, *šūō* ‘dog’ < **k^wúó*, etc.
- III. prepositions/adverbs: *nuō* ‘from’ ~ *núotaka* ‘bride’, *vēl* ‘again’ ~ Latvian *vēl* ‘still, yet’ < PB **vēli*, *tē* (permissive particle) < **teh₁*, cf. Gk. *τῆ* ‘there’, etc.
- IV. pronominal forms: *tuō* < **toh₁* (m.sg.instr.) ~ *gerúoju* ‘the good’ (m.sg.instr.), *tiē* < **toi* (pl.nom.) ~ *geriéji* (pl.nom), *tuōs* < **tōns* (pl.acc.) ~ *gerúosius* (pl.acc.), etc.

She concludes that the data can be explained by “a combination of MC in the Proto-Balto-Slavic time and the dialectal tendency of West Aukštaitian dialects of Lithuanian” (2016: v).

In earlier publications (e.g. Kortlandt 1985a; 2002; 2014b) I have argued that there are two chronological layers of metatonical circumflex in monosyllables, viz. an early Balto-Slavic layer which is reflected e.g. in Lith. *dēs* ‘will put’, *jōs* ‘will ride’, *duōs* ‘will give’, *liēs* ‘will pour’, also *dēvi* ‘wears’ (cf. Kortlandt 1989, 111), analogical *kalbēs* ‘will speak’, *žinōs* ‘will know’, and Latvian *sāls* ‘salt’, *gūovs* ‘cow’, and a recent Aukštaitian layer which is found e.g. in nom.pl. *tiē*, acc.pl. *tuōs*, inst.sg. *tuō*, also adv. *geriaū* ‘better’, *sukaū* ‘I turned’, *sukaī* ‘you turned’, cf. *geriáusiai* ‘best’, Latvian *tiē*, *tuōs* with an acute. The crucial piece of evidence for the distinction is provided by the southern and eastern Aukštaitian dialects, where we find e.g. *daris* ‘will do’, *rašis* ‘will write’, *sakis* ‘will say’ with regular shortening in accordance with Leskien’s law (cf. Zinkevičius 1966, 361). The absence of shortening in *stovēs* ‘will stand’, *žinōs* ‘will know’, *dainuōs* ‘will sing’ in the large majority of Aukštaitian dialects shows that the circumflex in these verb forms is older than Leskien’s law. It follows that the same holds for *dēs*, *jōs*, *duōs*, which provided the model for the metatony in the 3rd person future forms of polysyllabic verbs. Metatony then spread to the verbs in *-ýti* in the western

Aukštaitian dialects, e.g. *darỹs*, *rašỹs*, *sakỹs*, while shortening was generalized in a part of the eastern dialects, e.g. *dēs*, *stovēs*, *žinās* (cf. Zinkevičius 1966, 362). The secondary character of this shortening is clear from two peculiarities. Firstly, it affected not only acute but also original circumflex vowels, e.g. Ukmergė *pūs* ‘will blow’ (*pūsti*), Jukiškiai *siūs* ‘will send’ (*siūsti*, also *siūti* ‘sew’ and *siūsti* ‘rage’), Linkmenys *vągs* ‘will steal’ (*vōgti*). Secondly, it gave rise to new short vowels, e.g. Linkmenys *dōs* ‘will give’, imperative *dòt* ‘give!’, Tverečius *važí* (= *važìj*) ‘travel!’. The absence of shortening in Tverečius *duōs* ‘will give’ and *važiuōs* ‘will travel’ as opposed to *jās* ‘will ride’ and *dēs* ‘will put’ shows that the analogical shortening in the latter was more recent than the Aukštaitian diphthongization of **ō* to *uo* in the former (cf. Zinkevičius 1966, 503 and McKenzie 1918). These examples show that Leskien’s law never operated in *dēs*, *jōs*, *duōs*, *stovēs*, *žinōs*, *važiuōs*, unlike *daris*, *rašis*, *sakis*, and that the metatony in these forms must be older than Leskien’s law, unlike the circumflex of *darỹs*, *rašỹs*, *sakỹs*. The idea that the shortened forms *dēs* and *jās* of the easternmost dialects are original and that *dēs* and *jōs* are analogical (e.g. Pedersen 1933, 14; Petit 2002, 270; Pronk 2012, 236) cannot be correct.

In monosyllables, Leskien’s law affected the high vowels *-ý-* and *-ú-* only, e.g. *gìs* ‘will heal’, *bùs* ‘will be’, also *jì* ‘she’, acc. *jùs* ‘you’, except in northwestern Žemaitian, where we also find inst.sg. *tò*, acc.pl. *tùs*. In the 3rd person future forms of the verb, the shortened high vowels are gradually replaced by circumflex long vowels on the analogy of the non-high vowels in the western Aukštaitian dialects, including the literary language, e.g. *vỹs* ‘will chase’ (*výti*) or ‘will fade’ (*výsti*), *siũs* ‘will sew’. The spread of the circumflex in 3rd person future forms of monosyllabic verbs with a high vowel is taking place right before our eyes (cf. Senn 1966, 231 and Petit 2002, 248). The highly frequent form *bùs* ‘will be’ appears to resist the spread of the circumflex even in the northwestern Aukštaitian dialects, where the development is pervasive. It follows that we cannot identify the early metatony in *dēs*, *jōs*, *duōs*, *stovēs*, *žinōs* with the recent metatony in *tiē*, *tuōs*, *tuō*, *sukaũ*, *sukaĩ* because Leskien’s law was younger than the former but older than the latter. Contrary to Petit’s account of my view (2002, 262f.), this analysis is not based on a comparison with Slavic or Indo-European but on the internal evidence of the East Baltic languages.

The Baltic future represents two Indo-European paradigms, viz. an s-present of the type 3rd sg. **tresti*, 3rd pl. **trsentì*, with accentual mobility

between the suffix and the ending, and an s-aorist of the type 3rd sg. **tērst*, 3rd pl. **tersnt*, with fixed stress on the root and monosyllabic lengthening in the 2nd and 3rd sg. forms (cf. Pedersen 1921, which Yamazaki does not cite, and Kortlandt 1984; 2002; 2005a; 2008; 2012b). In Lithuanian, the future of verbs with a high vowel continues the original s-present whereas the future of verbs with a non-high vowel represents the s-aorist injunctive. Both formations must have existed side by side in Proto-Baltic in view of Prussian *teīks* ‘make!’ beside *postāsei* ‘you will become’. Lithuanian *bùs* < **būs* has an exact correspondence in the Old Irish subjunctive *-bé* < **bwes* ‘be’ with generalization of the zero grade root in the paradigm. There is no reason to assume that the zero grade was taken from nasal presents or *ā*-preterits, as Yamazaki maintains (2016, 99–103). Her account of the historical background of the s-future (2016, 94–98) is entirely misguided, evidently as a result of her reliance on Jasanoff’s characteristic methodology of multiplying hypotheses (cf. Kortlandt 2004a; 2005b; 2009b). Note that Villanueva Svensson (2012) also disregards Pedersen’s and my publications mentioned above.

The circumflex of Latvian *sāls* ‘salt’ and *gūovs* ‘cow’ shows metatonical length in **sāl-* and **gōv-* from earlier **seH₂l-* and **g^weH₃u-* as a result of an early lengthening in original monosyllables, as in Lith. *duōs* < **dōs* < **deH₃-* (cf. Kortlandt 1985a, 118f.). Villanueva Svensson objects (2011, 15) to my loss of a laryngeal after a long vowel in Latvian *sāls* and *gūovs* that we find an acute in *nāss* ‘nostril’, Lith. *nósis* (1) ‘nose’ < **neH₂s-* (cf. Kortlandt 1985a, 119). The objection does not hold because all of these words have the vocalism of the acc.sg. form, and the same holds for Latvian *zūoss* ‘goose’ and *zvērs* ‘beast’, Lith. *žqsis* and *žvēris*, both of which had mobile stress (cf. Pronk 2012, 216; Kortlandt 2012a, 251; 2013b, 14). There is no evidence for a PIE phoneme **a* in the words for ‘salt’, ‘goose’ and ‘nose’, nor for the vowel **e* in the PIE paradigm of ‘cow’, nor for a PIE paradigm with fixed stress in the case of ‘cow’, ‘nose’ and ‘beast’, nor for a generalization of the original nom.sg. instead of acc.sg. accentuation in the words for ‘salt’ and ‘nose’ (contra Villanueva Svensson 2011, 15, 20). All of these ideas depend on supplementary hypotheses which are superfluous if the logical consequences of the laryngeal theory are taken into account. Yamazaki follows the traditional doctrine reconstructing PIE **g^wóus*, acc.sg. **g^wóm*, obl. **g^wéu-*, **nās*, **nas-*, **ǵ^huēr*, **ǵ^huer-*, **sāl*, **sal-*, **ǵ^hāns*, **ǵ^hans-* (2016, 115–127). These reconstructions are incompatible with the

laryngeal theory, as Lubotsky has demonstrated (1981; 1989; 1990). Her etymological connection of the word for ‘beast’ with Vedic *á-hruta-* ‘not-gone-crooked’ (2016, 59) is not convincing: the latter word must rather be connected with Lith. *pa-žulnùs* ‘crooked, oblique’, *pažvilti* ‘to bend, stoop’, Slavic *zvlb* ‘bad, evil’. Her relative chronologies (2016, 118-141) are not based on the comparative method but on preconceived ideas about possible pathways. Contrary to her assumptions (2016, 132), there was no “acute assignment” (because glottalization was never automatic in long vowels), no early *i*-apocope (because such forms as **dōsti* never existed and final **-i* was preserved in case and tense endings), no early generalization of *i*-stems (as is clear from the preservation of consonantal gen.pl. forms such as *žsqū* and *žvērū*), and no shortening of long diphthongs (Osthoff’s law, cf. Kortlandt 2014b, 220). The Proto-Baltic word for ‘dog’ was not ***sō* (Yamazaki 2016, 138) but disyllabic **šuō*, as is clear from Vedic *śuā*, Greek *κύων* and Welsh *ci* (not ***pi*), and the same holds for ***zmō* ‘man’ (2016, 140) in view of Old Latin *hemō* < **d^hgemō* (cf. Kloekhorst 2015).

We find an acute in the nominal prefix *ǰ-*, e.g. *ǰlanka* ‘bay’, *ǰpēdinis* ‘heir’, *ǰsūnis* ‘adopted son’, *ǰndēvē* ‘poison’, as opposed to *ĩ-* in *ĩlinkas* ‘concave’, *ĩprastas* ‘usual’, *ĩsuka* ‘screws in’, *ĩndas* ‘dish’. This is the same alternation as in *pókalbis* ‘conversation’, *prótēvis* ‘ancestor’, *prietēmis* ‘twilight’, *pérpykis* ‘anger’ beside *pō* ‘about’, *prō* ‘through’, *priē* ‘at’, *peř* ‘across’, cf. also *núo-*, *nuō-* and *sǰ-*, *sǰ-* (e.g. in *sañdo* ‘hires’, *sañdas* ‘component’), and the short prefixes *pa-*, *pra-*, *pri-*, *nu-*, *su-*. Since the Balto-Slavic acute was a glottal stop which developed from an Indo-European laryngeal or preglottalized stop after an original short vowel or diphthong, *ǰ-*, *pó-*, *pró-*, *prie-*, *pér-*, *sǰ-*, *núo-* are the expected variants of *ǰ* < **in*, *pa-*, *pra-*, *priē* < **prei*, *peř*, *sañ-*, **na* (Prussian *na* ‘on’) before an Indo-European word-initial laryngeal or preglottalized stop, e.g. in *nēsti* ‘to carry’, *dúoti* ‘to give’, cf. Greek ἤνεγκον ‘I brought’, δίδωμι ‘I give’. Thus, the rise of the acute in the prefixes is the same as in the reduplication syllable of *dúodu* as opposed to *dedù* ‘I put’, Greek τίθημι (cf. Kortlandt 1977, 323). The acute nominal prefixes are also attested in Slavic, e.g. Russian *páguba* ‘ruin’, *pásynok* ‘stepson’, *prádedy* ‘ancestors’, *súdoroga* ‘cramp’, *súmerki* ‘twilight’, which clearly show that the formation can be dated to the Balto-Slavic period. Apart from the tonal difference, there is an apophonic distinction between zero grade in Lith. *ǰ-*, *pri-*, *nu-*, *su-*, also Slavic *v̥* ‘in’, *s̥* ‘with’, and full grade in Lith. *pa-*, *pra-*, *prie-*, *nuo-*, *sǰ-*, Latvian *ie-* ‘in’ < **en*, Slavic *po* ‘after’, *pro* ‘through’,

pri ‘at’ < **prei*, *na* ‘on’ < **noH*, *sq-* ‘together’ < **som*, *q-* ‘in’ < **on-* in *qtrv* ‘inside’, *qtroba* ‘entrails’, Russian *vnútrí*, *utróba*. It appears that the vowel of Lith. *nu-*, *su-* and Slavic *vъ*, *sv* represents a secondary zero grade on the analogy of the *o*-grade in Lith. *nuo-*, *sq-*, Slavic *q-*, *sq-* (cf. Trautmann 1923, 4; Vaillant 1950, 173; Kortlandt 2007, 10; 2009a). Glottalization was preserved under the stress in both nouns and verbs, as is clear from Lith. *pér-* and Russian *vý-* < **ud-*, also Latvian *nuõst* ‘away’, *pruõjām* and *pruõjām* ‘away’ (Būga 1959, 426), but was lost in proclitics, as in Lith. *nuõ*, *põ*, *prõ*, *peř*, Russian *péred*. For the Lith. particles *lai* (optative) and *vėl* ‘again’, Latvian *lai* and *vėl*, Yamazaki assumes an Aukštaitian layer of recent metatony in monosyllables (2016, 165). No conclusions can be based on such particles as Lith. *nũ* ‘now’, *tẽ* (permissive), *nẽ* ‘not even’ beside *nù*, *tè*, *nè*.

The Aukštaitian metatony which is found e.g. in *tiẽ*, *tuõs*, *tuõ*, *sukaũ*, *sukaĩ* was more recent than Leskien’s law, according to which acute long vowels in final syllables were shortened, e.g. in nom.pl. *gerì*, acc.pl. *gerùs*, inst.sg. *gerù* ‘good’, *sukù* ‘I turn’, *sukì* ‘you turn’, cf. *geríeji*, *gerúosius*, *gerúoju*, *sukúosi*, *sukiesi*. In monosyllables, Leskien’s law affected the high vowels *-ý-* and *-ũ-* only, e.g. *gìs* ‘will heal’, *bùs* ‘will be’, *jì* ‘she’, acc. *jùs* ‘you’, except in northwestern Žemaitian, where we also find inst.sg. *tò*, acc.pl. *tùs*. The circumflex of Žemaitian *tēi*, *tě*, *tī* (Yamazaki 2016, 176) is not metatonical but reflects the original stressed masc. nom.pl. form **tai* < **toi*, not the neuter form **taHi* that is reflected in the Aukštaitian variant *tíe* and Latvian *tiẽ* (cf. Kortlandt 1993, 46, not cited by Yamazaki). The metatony did not reach the westernmost Aukštaitian dialects, where we find *tíe*, *túos*, *túo* with an acute. Leskien’s law preceded the Aukštaitian metatony, which is a much more local development and has nothing to do with the early Balto-Slavic metatony in *děs*, *jōs*, *duōs*, *liēs* and *děvi*. The acc.pl. forms Žemaitian *tùs*, *tàs*, Aukštaitian *túos*, *tás*, Latvian *tuõs*, *tās* are the phonetic reflexes of **toHns*, **taHns*, with generalization of the acute in these endings because in the acc. sg. endings **-ām* < **-aHm*, **-īm* < **-iHm*, **-ūm* < **-uHm* the laryngeal had been lost at an early stage (cf. Kortlandt 2014b, 220; 2016, 92, for the loss of the nasal in **-oHns* see Kortlandt 1977, 323f.). The Aukštaitian endings of fem. nom.sg. *tà*, inst.sg. *tà*, *tá*, acc.pl. *tàs* (Yamazaki 2016, 169–174) were taken from the nominal flexion. The dialectal inst.sg. form *tuõm* < *tuomì* (Kortlandt 2004b, 72; Yamazaki 2016, 177) adopted the ending *-mì*, like Slavic *těmb*, and its circumflex resulted from the apocope of the final vowel, as in the illative *miškañ* < *miškanà* ‘into the forest’ (cf. Kortlandt

2005c, 67). Contrary to Yamazaki's view (2016, 179), there is no reason to assume that the early Balto-Slavic metatony affected pronominal forms. For the personal pronouns I refer to my earlier study (2013a).

We may now reconsider the role of the comparative method in distinguishing between linguistic reconstruction and philosophical speculation. I will limit myself here to the etyma listed by Yamazaki in her introduction (2016, 25f.): Lith. *šōks*, *vỹs*, Latvian *gùovs*, Lith. *šuō*, *nuō*, *vēl*, *tuō*, *tiē*, *tuōs*. The verb *šōkti* 'to jump' has no reliable etymology (Derksen 2015, 454) but belongs to the same category as *jōti* 'to ride' < *-eH₂-, future *jōs* < **jās* with loss of the laryngeal after coloring the preceding long vowel. The form *vỹs* of *vỹti* 'to chase' < *-iH₁- (Derksen 2015, 508) must be analogical because it contains a zero grade root and there was no long vowel *-ī- in Proto-Indo-European. Latvian *gùovs* 'cow' reflects the acc.sg. form **g^wēH₃m*, with loss of the laryngeal after coloring the preceding long vowel, like *sāls* 'salt' < **sēH₂l* (cf. Kortlandt 2014b, 221). Lith. *šuō* 'dog' was disyllabic on the evidence of Vedic, Greek and Welsh (see above). The preposition *nuō* can be identified with Latvian *nùo* and Slavic *na* < **noH* (Yamazaki 2016, 147) with loss of the acute in the proclitic form but its preservation under the stress in the nominal prefix, e.g. in Lith. *núorašas* 'copy', Latvian *nuōdaļa* 'section'. The metatony in Lith. *vēl*, *tiē*, *tuōs*, *tuō* is a recent Aukštaitian dialectal development that is reflected in the standard language, cf. Latvian *vēl*, *tiē*, *tuōs*, *tuō* with an acute. Thus, the early Balto-Slavic metatony is the loss of a laryngeal after coloring a preceding long vowel.

The Proto-Indo-European long vowels **ē* and **ō* originated as a result of phonetic lengthening in monosyllabic word forms and before word-final resonants (cf. Kortlandt 2012a and 2015), e.g. Tocharian B *śem* 'came' < **g^wēm-*, *lyāka* 'saw' < **lēg-*, Latin *vēnit*, *lēgit*, *homō* 'man', Lith. *šuō* 'dog', Greek ὕδωρ 'water', Vedic loc.sg. *sūnāu* 'son', also Lith. *ėmė* 'took', *bėrė* 'strewed', *pėrė* 'thrashed', *lėkė* 'flew', *srėbė* 'sipped', Vedic *ásrāk* 'emitted'. There is no evidence this type of long vowel ever became acute (cf. Kortlandt 2012a, which Yamazaki does not cite, and Pronk 2012). The pre-laryngealist idea that any Proto-Indo-European long vowel became acute in Balto-Slavic (e.g. Villanueva Svensson 2011) is a typical example of philosophical speculation contradicted by the comparative evidence. Villanueva claims to find instances of an acute in Narten presents, causatives and desideratives, lengthened grade iteratives, root nouns, "Narten nouns" and *vṛddhi* derivatives with an acute tone in Balto-Slavic (2011,

21–32). He states that “the lack of direct cognates can be compensated by a recent finding of comparative grammar”, viz. what he calls the “Narten derivational system” that “allows us to go a step beyond the limits of the comparative method” (2011, 21). This is what I call giving a free hand to unrestrained speculation. As an example he adduces Vedic *sādád-* ‘sitting’ (allegedly from **sēd-nt-*), which is a nonce form, beside Old Irish *sáidid* ‘thrusts’ (rather than “sets, fixes”, cf. Thurneysen 1946, 336, allegedly a causative **sōd-eie-* but more probably a denominative **sōd-ie-*), Latin *sēdēs* ‘seat’ (allegedly an s-stem but probably a root noun and possibly an *ē*-stem, cf. Schrijver 1991, 376) and Old Irish *síd* ‘peace’, where the long vowel is secondary in view of Welsh *hedd*. In fact, the ablaut patterns in the Vedic aorist are in contradiction with the postulates of the Narten system and the concept of Narten presents or a Narten system is a mirage (cf. Kortlandt 2015 and de Vaan 2004). Villanueva assumes Lith. *vārna* ‘crow’ and *vilkė* ‘she-wolf’ to be *vṛddhi* derivatives of *vaṛnas* ‘raven’ and *vīlkas* ‘wolf’ (2011, 30) though the former pair can hardly be separated from Latin *corvus*, *cornīx* and Greek *κόραξ*, *κορώνη* and the latter pair is identical with Sanskrit *vṛkas*, *vṛkís*. While the latter words have a zero grade root that is incompatible with *vṛddhi*, the former pair must rather be compared with Russian *sérna* ‘roe deer’ and Latvian *mēļns* ‘black’ beside Lith. *šiřvas* ‘grey’, *mulřvas* ‘reddish’ (cf. Kortlandt 1985a, 121). Actual *vṛddhi* formations in Balto-Slavic do not have an acute root, e.g. Serbo-Croatian *jáje* ‘egg’, *měso* ‘meat’, Lith. *mėsà* (4), Žemaitian *mēsà* (4), Latvian *mīesa*, Greek *ῥόν*, Vedic *māṃsám*.

Other examples of philosophical speculation contradicted by the comparative evidence are spontaneous glottalization (Jasanoff’s “acute assignment”, unattested anywhere in the world), Jasanoff’s trimoraic long vowels (cf. Yoshida 2012, 240–242), Eichner’s law (cf. Kortlandt 2003, 11), Osthoff’s law (cf. Kortlandt 2014b, 220), and Szemerényi’s law, according to which the Proto-Indo-European long vowels developed from the loss of an unattested final consonant, usually **-s*, with compensatory lengthening of the preceding vowel (e.g. Yamazaki 2016, 139). Apart from the fact that it is hard to see how Szemerényi’s law can account for such instances as Greek *ῥδωρ* ‘water’, *ῥχώ* < **-ōi* ‘echo’, Vedic loc.sg. *agnā* < **-ēi* ‘fire’, *sūnāu* ‘son’, it is important to note that it is an instance of circular reasoning: the long vowel is allegedly explained by the supposed loss of the consonant that is postulated in order to account for the long vowel. Kim (2012, 148–151) proposes to explain the Balto-Slavic acute in the acc.pl. ending of the *o*-stems

-oms by assuming a combination of six pieces of speculation that are at variance with the comparative evidence: (1) Szemerényi's law yielding $-\bar{o}m$, followed by (2) spontaneous acute assignment, (3) restoration of the ending $*-ms$ from "other stem classes" (*i*- and *u*-stems?), and loss of the nasal; in the *aH*-stems (4) early loss of the nasal in the ending $*-aHms$ yielding $*-\bar{a}s$, with acute assignment and (5) restoration of the nasal "on the pattern of other acc. pls." (*i*- and *u*-stems?) yielding acute $*-\bar{a}ns$, also (6) "independently in Old Prussian and probably also Slavic", and on top of it all: spread of the acute to the *i*- and *u*-stem endings "at any point in the prehistory of East Baltic" and loss of the nasal in the endings $*-\bar{i}ns$ and $*-\bar{u}ns$. In actual fact, the Balto-Slavic ending adopted the acute on the analogy of paradigms with a stem-final laryngeal because in the acc.sg. endings $*-\bar{a}m < *-\bar{a}Hm$, $*-\bar{i}m < *-\bar{i}Hm$, $*-\bar{u}m < *-\bar{u}Hm$ the laryngeal had been lost at an early stage (see above). For the reflexes of the acc.sg. and gen.pl. endings $*-om$ I refer to my earlier studies (1978; 2014a; 2016).

The Balto-Slavic acute continues the Proto-Indo-European laryngeals and the glottalic feature of the traditional Proto-Indo-European "unaspirated voiced" obstruents (Winter's law, cf. Kortlandt 1988 and 2011). Yamazaki objects to the glottalic theory (2016, 50) on the basis of Vine's review (1988) of Gamkrelidze and Ivanov's theory (1984). However, this review is totally irrelevant because it addresses only the typological argument, which I reject (cf. Kortlandt 1995). Yamazaki does not mention the comparative evidence that I have adduced at various occasions (e.g. 1985b; 2012c). My reconstruction is based on direct evidence from Indo-Iranian, Armenian, Baltic and Germanic and indirect evidence from Indo-Iranian, Greek, Latin and Slavic. By giving up the assumption that the traditional voiced stops were indeed plain voiced stops, it has become possible to explain a whole range of phenomena in all of these branches of Indo-European (see also Kloekhorst 2014 and 2016 on Anatolian). In my view, the Proto-Indo-European system $*t$, $*t'$, $*t$ that had arisen under the influence of a North Caucasian substratum became $*t$, $*'d$, $*d$ except in Anatolian and Tocharian, then $*t$, $*d$, $*b/\delta$ in Italic, $*t$, $*d$, $*t^h$ in Greek, later $*b$, $*'t$, $*t$ in Germanic, $*t^h$, $*t'$, $*d$ in Armenian, $*t$, $*'d$, $*d^h$ in Indic, $*t$, $*ʔd$, $*d$ in Balto-Slavic, and $*t$, $*d$ in Iranian, Albanian, Phrygian and Celtic. It must be regretted that Yamazaki's supervisors have not drawn her attention to the relevant publications.

DĒL METODO

Santrauka

Lingvistinės rekonstrukcijos pagrindas yra lyginamasis metodas, kurio esmė – teiginys, kad esama „didesnio artumo – tiek veiksmažodžių šaknų, tiek gramatikos formų atžvilgiu – nei toks, koks būtų galėjęs atsirasti dėl atsitiktinumo“ ir jis implikuoja bendro šaltinio buvimą (pasak sero Williama Joneso, 1786 m.). Vadinasi, turėjusi būti ir tam tikra galimų pakitimų nuo rekonstruojamos sistemos iki paliudytų duomenų seka. Šie pakitimai turėję būti arba fonetiškai reguliarūs, arba analoginiai. Pastarasis tipas reikalauja modelio ir motyvacijos. Teorija, kuri nepaaiškina duomenų garsų dėsniais ar gerai motyvuotais analoginiais pakitimais, yra ne lingvistinė rekonstrukcija, o filosofinė spekuliacija.

Ikilingualistinė idėja, kad visi indoeuropiečių ilgieji balsiais virtę akūtiniais baltų ir slavų kalbose, yra tipinis filosofinės spekuliacijos, prieštaraujančios lyginamiesiems duomenims, pavyzdys. Kiti pavyzdžiai yra spontaninė glotalizacija (Jasanoffo „akūto priskyrimas“, nepaliudytas niekur kitur pasaulyje), Jasanoffo trimoriai ilgieji balsiai, Eichnerio dėsnis, Osthoffo dėsnis ar Szemerényi'o dėsnis, kuris yra bandymo įrodyti logiškai ydingu ratu atvejis. Baltų-slavų akūtas tęsia indoeuropiečių laringalus ir tradiciškai rekonstruojamų „skardžiųjų neaspiruotųjų“ sprogstamųjų priebalsių glotalinį požymį (Winterio dėsnis). Manoji indoeuropiečių glotalinių priebalsių rekonstrukcija remiama tiesioginiais įrodymais iš indų-iranėnų, armėnų, baltų ir germanų kalbų, taip pat netiesioginiais įrodymais iš indų-iranėnų, graikų, lotynų ir slavų kalbų.

REFERENCES

Beekes, Robert S. P. 2011, *Comparative Indo-European linguistics: An introduction*, 2nd ed., Amsterdam: Benjamins.

Būga, Kazimieras, 1959 *Rinktiniai raštai 2*, Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla.

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

Gamkrelidze, Tamaz V., Vjačeslav V. Ivanov 1984, *Indoeuropejskij jazyk i indoeuropejcy: Rekonstrukcija i istoriko-tipologičeskij analiz prajazyka i protokul'tury*, Tbilisi: Izd. Tbilisskogo Universiteta.

Kim, Ronald I. 2012, The PIE thematic animate accusative plural revisited, in Roman Sukač, Ondřej Šefčík (eds.), *The sound of Indo-European 2*, München: Lincom, 144–158.

Kloekhorst, Alwin, 2014, *Accent in Hittite*, Wiesbaden: Harrassowitz.

Kloekhorst, Alwin 2015, Proto-Indo-European “thorn”-clusters, *Historische Sprachforschung* 127, 43–67.

Kloekhorst, Alwin 2016, The Anatolian stop system and the Indo-Hittite hypothesis, *Indogermanische Forschungen* 121, 213–247.

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

Kortlandt, Frederik 1978, On the history of the genitive plural in Slavic, Baltic, Germanic, and Indo-European, *Lingua* 45, 281–300.

Kortlandt, Frederik 1984, Old Irish subjunctives and futures and their Proto-Indo-European origins, *Ériu* 35, 179–187.

Kortlandt, Frederik 1985a, Long vowels in Balto-Slavic, *Baltistica* 21(2), 112–124.

Kortlandt, Frederik 1985b, Proto-Indo-European glottalic stops: The comparative evidence, *Folia Linguistica Historica* 6(2), 183–201.

Kortlandt, Frederik 1988, Remarks on Winter's law, in A. A. Barentsen, B. M. Groen, R. Sprenger (eds.), *Dutch contributions to the 10th International Congress of Slavists: Linguistics (= Studies in Slavic and General Linguistics 11)*, 387–396.

Kortlandt, Frederik 1989, Lithuanian *statyti* and related formations, *Baltistica* 25(2), 104–112.

Kortlandt, Frederik 1993, Tokie šalti rytai. *Baltistica* 28(1), 45–48.

Kortlandt, Frederik 1995, General linguistics and Indo-European reconstruction, *Rask* 2, 91–109.

Kortlandt, Frederik 2002, Shortening and metatony in the Lithuanian future, *Baltistica* 37(1), 15–16.

Kortlandt, Frederik 2003, Initial laryngeals in Anatolian, *Orpheus* 13–14 [Gs. Rikov], 9–12.

Kortlandt, Frederik 2004a, Balto-Slavic accentuation: Some news travels slowly, *Baltistica* 39(1), 13–17.

Kortlandt, Frederik 2004b, Final stress in Balto-Slavic mobile paradigms, *Baltu Filologija* 13(1), 71–74.

Kortlandt, Frederik 2005a, Holger Pedersen's *Études lituaniennes* revisited, *Baltistica* 6 priedas, 151–157.

Kortlandt, Frederik 2005b, Noises and nuisances in Balto-Slavic and Indo-European linguistics, *Baltistica* 40(1), 9–11.

Kortlandt, Frederik 2005c, On the accentuation of the illative, *Baltu Filologija* 14(1), 67–69.

Kortlandt, Frederik 2007, The development of the Indo-European syllabic resonants in Balto-Slavic, *Baltistica* 42(1), 7–12.

Kortlandt, Frederik 2008, The origin of the Indo-Iranian desiderative, in Leonid Kulikov, Maksim Rusanov (eds.), *Indologica* [Gs. Elizarenkova], Moskva: RGGU, 227–230.

Kortlandt, Frederik 2009a, The Baltic word for 'in', *Baltistica* 44(1), 33–35.

Kortlandt, Frederik 2009b, All's well that ends well, *Baltistica* 44(1), 59–63.

Kortlandt, Frederik 2011, Winter's law again, in Tijmen Pronk, Rick Derksen (eds.), *Accent matters: Papers on Balto-Slavic accentology (= Studies in Slavic and General Linguistics 37)*, 245–250.

- Kortlandt, Frederik 2012a, The early chronology of long vowels in Balto-Slavic, *Baltistica* 47(2), 249–254.
- Kortlandt, Frederik 2012b, The Tocharian s-present, *Tocharian and Indo-European Studies* 13, 149–151.
- Kortlandt, Frederik 2012c, Proto-Indo-European glottalic stops: The evidence revisited, www.kortlandt.nl/publications/art282e.pdf.
- Kortlandt, Frederik 2013a, Balto-Slavic personal pronouns and their accentuation, *Baltistica* 48(1), 5–11.
- Kortlandt, Frederik 2013b, Palatovelars before syllabic resonants: another look, *Baltistica* 48(1), 13–17.
- Kortlandt, Frederik 2014a, Reconstructing Balto-Slavic and Indo-European, *Baltistica* 49(1), 5–13.
- Kortlandt, Frederik 2014b, Metatony in monosyllables, *Baltistica* 49(2), 217–224.
- Kortlandt, Frederik 2015, Sigmatic and asigmatic long vowel preterit forms, *Journal of Indo-European Studies* 43, 236–242.
- Kortlandt, Frederik 2016, The inflexion of the Indo-European o-stems in Balto-Slavic, *Baltistica* 51(1), 87–96.
- Lubotsky, Alexander 1981, Gr. *pégnumi* : Skt. *pajrá-* and loss of laryngeals before mediae in Indo-Iranian, *Münchener Studien zur Sprachwissenschaft* 40, 133–138.
- Lubotsky, Alexander 1989, Against a Proto-Indo-European phoneme *a, in Theo Vennemann (ed.), *The new sound of Indo-European*, Berlin: Mouton de Gruyter, 53–66.
- Lubotsky, Alexander 1990, La loi de Brugmann et *H_{3e-}, in Jean Kellens (ed.), *La reconstruction des laryngales*, Paris: Les Belles Lettres, 129–136.
- McKenzie, Roderick 1918, Notes sur l'histoire des diphtongues *ie* et *uo* dans les langues baltes, *Bulletin de la Société de Linguistique de Paris* 21(2), 156–174.
- Pedersen, Holger 1921, *Les formes sigmatiques du verbe latin et le problème du futur indo-européen*, København: Høst & Søn.
- Pedersen, Holger 1933, *Études lituanienes*, København: Levin & Munksgaard.
- Petit, Daniel 2002, Abrègement et métatonie dans le futur lituanien: pour une reformulation de la loi de Leskien, *Bulletin de la Société de Linguistique de Paris* 97(1), 245–282.
- Pronk, Tijmen 2012, Proto-Indo-European long vowels and Balto-Slavic accentuation, *Baltistica* 47(2), 205–247.
- Schrijver, Peter 1991, *The reflexes of the Proto-Indo-European laryngeals in Latin*, Amsterdam: Rodopi.
- Senn, Alfred 1966, *Handbuch der litauischen Sprache 1: Grammatik*, Heidelberg: Carl Winter.
- Thurneysen, Rudolf 1946, *A grammar of Old Irish*, Dublin: DIAS.
- Trautmann, Reinhold 1923, Ein Kapitel aus der Lautlehre der baltisch-slavischen Sprachen, *Slavia* 2, 1–4.
- de Vaan, Michiel 2004, 'Narten' roots from the Avestan point of view, 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 (= *Innsbrucker Beiträge zur Sprachwissenschaft* 112), Innsbruck, 591–599.

Vaillant, André 1950, *Grammaire comparée des langues slaves 1: Phonétique*, Lyon: IAC.

Villanueva Svensson, Miguel 2011, Indo-European long vowels in Balto-Slavic, *Baltistica* 46(1), 5–38.

Villanueva Svensson, Miguel 2012, A note on the Baltic future participle, *Baltistica* 47(1), 15–21.

Vine, Brent 1988 (rev.), Tamaz V. Gamkrelidze, Vjačeslav V. Ivanov, *Indoeuropejskij jazyk i indoeuropejcy: Rekonstrukcija i istoriko-tipologičeskij analiz prajazyka i protokuł tury*, *Language* 64(2), 396–402.

Yamazaki, Yoko 2016, *Monosyllabic circumflexion in Lithuanian*, Stockholm: University.

Yoshida, Kazuhiko 2012, The loss of intervocalic laryngeals in Sanskrit and its historical implications, in Jared S. Klein, Kazuhiko Yoshida (eds.), *Indic across the millennia: From the Rigveda to modern Indo-Aryan*, Bremen: Hempen, 237–246.

Zinkevičius, Zigmas 1966, *Lietuvių dialektologija*, Vilnius: Mintis.

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