

Balto-Slavic acute

Since the First International Conference on Historical Linguistics (Edinburgh 1973) I have advocated the thesis that the Balto-Slavic acute is glottalization and has nothing to do with tonal movements (e.g. Kortlandt 1975, 1985a).¹ Thirty years later my thesis was taken over by Jay Jasanoff (cf. 2017: 71), who also adopted my view that the “history of the BSl. languages after the period of unity is in large part the history of how acuteness, originally an independent variable, came gradually to be absorbed into the accent system” (2017: 233, cf. Kortlandt 1977, 2011: 157-176). Unfortunately, Jasanoff evidently has not understood the implications of the new theory, perhaps because he is not sufficiently familiar with the data (cf. Kortlandt 2009: 81-86 and 2010: 337-339). The main problem of Balto-Slavic accentuation is not stress or tone but quantity (cf. Vermeer 1992, Kortlandt 2015b).

Jasanoff’s analysis of the Balto-Slavic acute is entirely based on his outdated reconstruction of the Proto-Germanic vowel system, which allegedly included a distinction between long (bimoric) and hyperlong (trimoric) vowels that were allegedly rephonemicized as acute versus non-acute long vowels in Balto-Slavic by the insertion of *stød* in the former (2017: 78). Unfortunately, Germanic and Balto-Slavic were never contiguous Indo-European dialects (cf. Kortlandt 2016, 2018c) and spontaneous glottalization is unattested anywhere in the world. Glottalization develops either (directly or indirectly) from a consonantal feature or from the apocope of a following syllable. Both developments are found in Danish (cf. Kortlandt 2010: 165-174, 293-318). Only the former can explain the Balto-Slavic acute, which occurs in any syllable.

Jasanoff’s bimoric and trimoric long vowels largely represent Indo-European VH- and VHV-sequences, which are reflected as acute and non-acute long vowels in Balto-Slavic. He distinguishes between three types of “inherent long vowels” (2017: 75), viz. apophonic long vowels in Narten ablaut and *vřddhi* derivation, long vowels allegedly from Szemerényi’s law, e.g. nom.sg. **-tēr* < ***-ters*, and long vowels allegedly from inner-IE contraction, e.g. nom.pl. **-ōs* < **-o-es*. The latter two types require special ad hoc rules because the circumflex tone of Lith. *duktė̃* ‘daughter’ < **-ēr*, *akmuō* ‘stone’ < **-ōn*, inst.pl. *-aīs* < **-ōis*, dat.sg. *-uī* < **-ōi*, also gen.sg. *-o* < **-ōd* (Latin *-ōd*, not ***-ād*, Lith. *-o* from unstressed **-ō*, cf. Kortlandt 1977: 323), is contrary to the acute expected by Jasanoff (2017: 89-92). These forms actually disprove Jasanoff’s theory. Conversely, the acc.pl. ending of the *aH*-stems, e.g. Lith. *gerásias* ‘the good’, directly continues **-aHns*, not **-ās* < **-āms* (thus Jasanoff 2017: 77⁷). The gen.pl. ending Lith. *-ū̃*, OPr. *-on*, Slavic *-ǫ* represents **-om*, Gothic *ā*-stems *-o* < **-ōan* < **-ā-om*, *i*-stems *-e* < **-ēan* < **-ei-om*, with introduction of the full grade suffix of the nom.pl. form, as in the Slavic *i*- and *u*-stems (cf. Kortlandt 1978, 2014a).

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

¹ My dissertation is not Kortlandt 1975 (thus Jasanoff 2017: 81¹⁶), which originated as a critique of Ebeling 1967, but Kortlandt 1972, because I started out as a mathematical linguist.

the comparative evidence. Other examples of philosophical speculation are Jasanoff's spontaneous glottalization, his trimoraic long vowels (cf. Boutkan 1995, Yoshida 2012: 240-242), Eichner's law (cf. Kortlandt 2010: 365-368), Osthoff's law (cf. Kortlandt 2014b: 220), and Szemerényi's law, which 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. It is hard to see how Szemerényi's law can account for such instances as Greek *ὕδωρ* 'water', *ἠχώ* < **-ōi* 'echo', Vedic loc.sg. *agnā́* < **-ēi* 'fire', *sūnáu* 'son'. In my view, the Proto-Indo-European long vowels **ē* and **ō* originated from phonetic lengthening in monosyllables and before final resonants (cf. Wackernagel 1896: 66-68, Kortlandt 2015a).

According to Jasanoff (2017: 81f.), "the main impetus for the glottalic theory in the form adopted by Kortlandt was the much-quoted, almost off-the-cuff 1958 observation by Roman Jakobson that no language adds to the pair /t/ ~ /d/ a voiced aspirate /dh/ without having its voiceless counterpart /th/". This is nonsense. The traditional reconstruction was challenged for various reasons by Pedersen (1951), Martinet (1953), Andreev (1957), Swadesh (1971) and others (cf. Kortlandt 2010: 12-15), but their work is evidently unknown to Jasanoff. Haudricourt reports (1975: 267) that as early as 1948 he arrived at the conclusion that the traditional voiced stops of the Indo-European proto-language were in fact glottalic and that the original pronunciation has been preserved in East Armenian. His argumentation was based on the types of phonetic development attested in the Far East. The negative attitude of Bloch and Kuryłowicz toward his view apparently kept him from publication. If Haudricourt, Pedersen, Martinet, Andreev and Swadesh had met at a conference in the late 1940-s, the glottalic theory might have become popular a generation earlier than it actually did.

It is remarkable that the comparative evidence has largely been left out of consideration in the discussion of the glottalic theory. I have argued that there is direct evidence from Indo-Iranian, Armenian, Baltic and Germanic and indirect evidence from Indo-Iranian, Greek, Latin and Slavic (cf. Kortlandt 1985b and 2017c). In recent years new evidence from Indo-Iranian, Greek, Latin, Germanic, Slavic and Anatolian has been added (e.g. Lubotsky 2007, 2013, Pronk-Tiethoff 2013, Garnier 2014, Kloekhorst 2014, 2015, 2016). Jasanoff completely disregards the comparative evidence except in the case of Lachmann's law, where he rejects the evidence on the basis of a mistaken analysis of Ukrainian dialectal material with imperfect voicing assimilation, e.g. in *veztý* 'to carry'.²

Jasanoff adduces the Austronesian language Kelabit as a parallel for the traditional reconstruction of a Proto-Indo-European system with **t*, **d*, **d^h* without **t^h* (2017: 83). This is again based on a mistaken analysis of the data. The Kelabit "voiced aspirates" *b^h*, *d^h*, *g^h* are voiced stops that are followed by homorganic voiceless stops that may be followed by little or no aspiration: [bp^(h)], [dt^(h)], [gk^(h)] (cf. Blust 2006: 313). They occur only intervocalically after the stress and alternate with *b*, *d*, *g* in other positions, e.g. *táb^həŋ* 'felling of trees', *təbəŋən* 'fell it!', *kátəd* 'back', *katád^hən* 'be left behind'. Other consonants are lengthened after a stressed *shwa*, e.g. [kót:əd], [təbəŋ:ən]. After hearing word tokens illustrating the "voiced aspirates", Peter

² Cf. Jasanoff 2004, referring to Andersen 1969. The fricative in this word is voiceless lenis, sometimes written [z^s] in the Ukrainian tradition (cf. Broch 1900: 31, Žovtobrjux 1965: 76, Andersen 1969: 169). There is no lengthening of the preceding vowel.

Ladefoged was sure that they must be consonant clusters of voiced and voiceless segments (Blust 2006: 318⁴). Historically related segments in other North Sarawak languages represent earlier voiced geminates. Nearly all other sources than Blust write *bp*, *dt*, *gk* for the Kelabit “voiced aspirates”. Thus, Blust’s superscript *h* denotes devoicing halfway the double consonant whereas in the Indo-European tradition superscript *h* denotes the breathy voice of a single consonant, which is practically the opposite (cf. also Stuart-Smith 2004: 18).

East Baltic metatony resulted from retractions of the stress from a prevocalic **i* and from word-final *-*à* (cf. Derksen 1996: 374-377). Jasanoff adopts Larsson’s hypothesis (2004) that a short vowel was lengthened when it received the stress from a following prevocalic **i*, attributes all instances of *métatonie douce* to this retraction followed by analogy, and completely disregards *métatonie rude* (2017: 84-86). In fact, the lengthening of short vowels is analogical (cf. already Derksen 1996: 52), as is especially clear from its absence in *ragānius*, *vandēnis*, *auksīnis*, *vasāris*, *beuodēgis*, *bemotēris*, *drapānis*, and the alleged spread of *métatonie douce* “as a derivational marker to related nominal and verbal categories” is completely unmotivated. Jasanoff attributes the circumflex lengthened grade in *žolė̃* (4) ‘grass’ and *gėlà* (4) ‘pain’ to analogy because he would expect an acute. In combination with the possibility of attributing any unexpected acute to an imagined “Narten system” this puts an end to the falsifiability of his theory (cf. also Petit 2010: 113-139).

In fact, the concept of a Narten system is a mirage (cf. de Vaan 2004, Kortlandt 2012). Jasanoff assumes (2017: 86) Lith. *vārna* ‘crow’ and *vilkė* ‘she-wolf’ to be *vṛddhi* derivatives of *vařnas* ‘raven’ and *vīřkas* ‘wolf’ though the former pair can hardly be separated from Latin *corvus*, *cornīx* and Greek *κόραξ*, *κορώνη* and the latter pair is identical with Sanskrit *vřkas*, *vřkīs*. 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 *mēřns* ‘black’ beside Lith. *šīřvas* ‘grey’, *muřvas* ‘reddish’ (cf. Kortlandt 1985a: 121). Actual *vṛddhi* formations in Balto-Slavic do not have an acute root, e.g. Serbo-Croatian *jáje* ‘egg’, *mēso* ‘meat’, Lith. *mēsà* (4), Žemaitian *męsà* (4), Latvian *miesa*, Greek *ῥόν*, Vedic *māřsám*. On the other hand, Lith. *vilkė* ‘she-wolf’, *zùikė* ‘she-hare’, *šérnė* ‘wild sow’ beside masc. *vīřkas*, *zuīkis*, *šėřnas* have regular *métatonie rude* as a result of the accent retraction from a prevocalic **i* < **iH*, analogically Latvian *siēva* ‘wife’ (cf. already Trautmann 1923: 301). The long rising vowel in the Latvian iteratives *nēřsāt*, *tēřkāt*, *lēřkāt*, *mēřtāt* is strongly reminiscent of the long rising vowel in the Serbo-Croatian iteratives *nósati*, *vódati*, *vózati*, *hódati* and is clearly the result of a recent development (cf. Schuyt 1990: 375f., Derksen 1996: 335-343). It cannot be compared with the lengthened grade of Latin *cēlāre* ‘to hide’, Greek *πηδάω* ‘leap’ (thus Jasanoff 2017: 87) because the latter represent a different formation (cf. Schuyt 1990: 381-386, Petit 2010: 136-138). Latvian *ruōta* ‘ornament’ is a western variant of *rùota* and cannot be used (cf. Derksen 1996: 263-265). Latvian *nuōma*, Lith. *núoma* ‘lease’ cannot be separated from Russian *naēm* ‘hire’ and represents **no-řm-* ‘take on’.

The acc.pl. ending of the *o*-stems *-*oHns* took its laryngeal from the *aH-*, *iH-* and *uH-*stems because the laryngeal had been lost before the final nasal in the acc.sg. endings *-ām* < *-*aHm*, *-īm* < *-*iHm*, *-ūm* < *-*uHm* in the Central Indo-European

languages (i.e. Classic Indo-European without Italo-Celtic, cf. Kortlandt 2017b).³ Since I have discussed monosyllabic lengthening in detail elsewhere (2014b, 2015a, 2017a, 2017b), I shall not return to the matter here, and the same holds for the pronouns (Kortlandt 2009: 89-92 and 2013). Contrary to Jasanoff's assertions (2017: 97-99), the Serbo-Croatian forms *dònijeh* 'I brought', *ùmrijeh* 'I died', *zàklēh* 'I swore' show the expected reflex of the lengthened grade vowel and never had final stress because the sigmatic aorist belonged to accent paradigm (b), which did not shift the stress onto a final *jer*.⁴ Again contrary to Jasanoff's expectations (2017: 101f.), the regular circumflex reflex of the lengthened grade is also found in the Lith. preterits *bẽrė* 'strewed', *lėkė* 'flew', *ẽmė* 'took', which represent original root aorists (cf. Kortlandt 2007: 154f.). The Baltic *ē*-preterit must be compared with the Slavic imperfect, e.g. Lith. *vėdė* 'led', OCS *vedě-aše* (cf. Kortlandt 2009: 185-187 on the distribution of *ā*- and *ē*-preterits in Baltic). I conclude that there is no evidence for an acute as the phonetic reflex of a lengthened grade vowel in Balto-Slavic.

References

- Andersen, Henning. 1969. Indo-European voicing sandhi in Ukrainian. *Scando-Slavica* 15, 157-169.
- Andreev, Nikolaj D. 1957. Periodizacija istorii indoevropskogo prajazyka. *Voprosy Jazykoznanija* 1957/2, 3-18.
- Blust, Robert. 1981. The origin of the Kelabit voiced aspirates: A historical hypothesis revisited. *Oceanic Linguistics* 45/2, 311-338.
- Boutkan, Dirk. 1995. *The Germanic 'Auslautgesetze'* [Leiden Studies in Indo-European 4] (Amsterdam: Rodopi).
- Broch, Olaf. 1900. *Ugrorusskoe narěčie sela Ubli* (Sankt-Peterburg: Tipografija Imperatorskoj Akademii Nauk).
- Derksen, Rick. 1996. *Metatony in Baltic* [Leiden Studies in Indo-European 6] (Amsterdam: Rodopi).
- Ebeling, Carl L. 1967. Historical laws of Slavic accentuation. *To Honor Roman Jakobson I* (The Hague: Mouton), 577-593.
- Garnier, Romain. 2014. Nouvelles considérations sur l'effet Kortlandt. *Glotta* 90, 139-159.
- Haudricourt, André-Georges. 1975. Les mutations consonantiques (occlusives) en indo-européen. *Mélanges linguistiques offerts à Émile Benveniste* (Louvain: Peeters), 267-272.
- Jasanoff, Jay H. 2004. Plus ça change... Lachmann's law in Latin. *Indo-European perspectives* [Fs. Morpurgo Davies] (Oxford: University Press), 405-416.
- Jasanoff, Jay H. 2017. *The prehistory of the Balto-Slavic accent* (Leiden: Brill).
- Kloekhorst, Alwin. 2014. *Accent in Hittite* (Wiesbaden: Harrassowitz).

³ Jasanoff questions the relevance of Latvian *ābuōls* 'apple' and Serbo-Croatian *žērāv* 'crane' (2017: 90), for no good reason. He cites Kortlandt 1994, which should not be consulted because it is full of printer's errors. The correct text is Kortlandt 1989, English version in Kortlandt 2011 (157-176, see also 277-309).

⁴ On the sigmatic future and aorist see further Kortlandt 2002, 2014b, 2015a, 2017a, 2018a, 2018b.

- 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. 1972. *Modelling the phoneme: New trends in East European phonemic theory* (The Hague: Mouton).
- Kortlandt, Frederik. 1975. *Slavic accentuation: A study in relative chronology* (Lisse: Peter de Ridder).
- 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. 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. 1989. Od praindoevropskog jezika do slovenskog (fonološki razvoj). *Zbornik za Filologiju i Lingvistiku* 32/2, 41-58.
- Kortlandt, Frederik. 1994. From Proto-Indo-European to Slavic. *Journal of Indo-European Studies* 22, 91-112.
- Kortlandt, Frederik. 2002. Shortening and metatony in the Lithuanian future. *Baltistica* 37/1, 15-16.
- Kortlandt, Frederik. 2007. *Italo-Celtic origins and prehistoric development of the Irish language* [Leiden Studies in Indo-European 14] (Amsterdam: Rodopi).
- 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. 2012. The early chronology of long vowels in Balto-Slavic. *Baltistica* 47/2, 249-254.
- Kortlandt, Frederik. 2013. Balto-Slavic personal pronouns and their accentuation. *Baltistica* 48/1, 5-11.
- 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. 2015a. Sigmatic and asigmatic long vowel preterit forms. *Journal of Indo-European Studies* 43, 236-242.
- Kortlandt, Frederik. 2015b. The development of vowel length in Slavic. *Jezikoslovní Zapiski* 21/2, 21-30.
- Kortlandt, Frederik. 2016. Baltic, Slavic, Germanic. *Baltistica* 51/1, 81-86.
- Kortlandt, Frederik. 2017a. On method. *Baltistica* 52/1, 33-45.
- Kortlandt, Frederik. 2017b. What is Stang’s law? *Baltistica* 52/1, 73-80.
- Kortlandt, Frederik. 2017c. Proto-Indo-European glottalic consonants. *Münchener Studien zur Sprachwissenschaft* 71/1, 147-160.
- Kortlandt, Frederik. 2018a. The Indo-European *k*-aorist. *Farnah* [Fs. Lubotsky] (Ann Arbor: Beech Stave), 137-142.

- Kortlandt, Frederik. 2018b. The origins of the Slavic aorist. *Dutch contributions to the 16th international congress of slavists: Linguistics* [Studies in Slavic and General Linguistics 43] (Leiden: Brill), 00-00.
- Kortlandt, Frederik. 2018c. The expansion of the Indo-European languages. *Journal of Indo-European Studies* 46, 219-231.
- Larsson, Jenny H. 2004. Metatony and length in Baltic. *Per aspera ad asteriscos* [Fs. Rasmussen] (Innsbruck: Institut für Sprachwissenschaft), 305-322.
- Lubotsky, Alexander. 2007. Sanskrit *na*-participles and the glottalic theory. *Verba docenti* [Fs. Jasanoff] (Ann Arbor: Beech Stave), 231-235.
- Lubotsky, Alexander. 2013. The Vedic paradigm for ‘water’. *Multi nominis grammaticus* [Fs. Nussbaum] (Ann Arbor: Beech Stave), 159-164.
- Martinet, André. 1953. Remarques sur le consonantisme sémitique. *Bulletin de la Société de Linguistique de Paris* 49: 67-78.
- Pedersen, Holger. 1951. *Die gemeinindoeuropäischen und die vorindoeuropäischen Verschlusslaute* [Historisk-filologiske Meddelelser 32/5] (København: Munksgaard).
- Petit, Daniel. 2010. *Untersuchungen zu den baltischen Sprachen* (Leiden: Brill).
- Pronk-Tiethoff, Saskia. 2013. *The Germanic loanwords in Proto-Slavic* [Leiden Studies in Indo-European 20] (Amsterdam: Rodopi).
- Schuyt, Roel. 1990. *The morphology of Slavic verbal aspect* [Studies in Slavic and General Linguistics 14] (Amsterdam: Rodopi).
- Stuart-Smith, Jane. 2004. *Phonetics and philology: Sound change in Italic* (Oxford: University Press).
- Swadesh, Morris. 1971. *The origin and diversification of language* (Chicago: Aldine-Atherton).
- Trautmann, Reinhold. 1923. *Baltisch-Slavisches Wörterbuch* (Göttingen: Vandenhoeck & Ruprecht).
- de Vaan, Michiel. 2004. ‘Narten’ roots from the Avestan point of view. *Per aspera ad asteriscos* [Fs. Rasmussen] (Innsbruck: Institut für Sprachwissenschaft), 591-599.
- Vermeer, Willem. 1992. In the beginning was the lengthened grade: On the continuity of Proto-Indo-European vowel quantity in Slavic. *Rekonstruktion und relative Chronologie: Akten der VIII. Fachtagung der Indogermanischen Gesellschaft, Leiden, 1987* (Innsbruck: Institut für Sprachwissenschaft), 115-136.
- Wackernagel, Jakob. 1896. *Altindische Grammatik I: Lautlehre* (Göttingen: Vandenhoeck & Ruprecht).
- Yoshida, Kazuhiko. 2012. The loss of intervocalic laryngeals in Sanskrit and its historical implications. *Indic across the millennia: From the Rigveda to modern Indo-Aryan* (Bremen: Hempen), 237-246.
- Žovtobrjux, Myxajlo A. 1965. Pryholosni v ukrajins’komu usnomu literaturnomu movlenni. *Zakonomirnosti rozvytku ukrajins’koho usnoho literaturnoho movlennja* (Kyjiv: Naukova dumka), 55-84.

Summary

There is no evidence for an acute as the phonetic reflex of a lengthened grade vowel in Balto-Slavic.