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METATONY IN MONOSYLLABLES

In earlier publications (e. g. 1985; 1997; 2002) 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. *dẽs* 'will put', *jõs* 'will ride', *duõs* 'will give', *liẽs* 'will pour', also *dẽvi* 'wears' (cf. Kortlandt 1989, 111), analogical *kalbẽs* 'will speak', *žinõs* 'will know', and Latvian *sàls* 'salt', *gùovs* 'cow', and a recent Aukštaitian layer which is found e. g. in nom. pl. *tiẽ*, acc. pl. *tuõs*, inst. sg. *tuõ*, also adv. *geriaũ* 'better', *sukaũ* 'I turned', *sukaĩ* 'you turned', cf. *geriáusiai* 'best', Latvian *tiẽ*, *tuõs* 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. *darìs* 'will do', *rašìs* 'will write', *sakìs* 'will say' with regular shortening in accordance with Leskien's law (cf. Zinkevičius 1966, 361). The absence of shortening in *stovẽs* 'will stand', *žinõs* 'will know', *dainuõs* '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 *dẽs*, *jõs*, *duõs*, 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. *dès*, *stovès*, *žinàs* (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 *pùs* 'will blow' (*pũsti*), Jukiškiai *siùs* 'will send' (*siųsti*, also *siūti* 'sew' and *siùsti* 'rage'), Linkmenys *vàgs* 'will steal' (*võgti*). Secondly, it gave rise to new short vowels, e. g. Linkmenys *dɔ̀s* 'will give', imperative *dɔ̀ť* 'give!', Tverečius *važ́ɔ́i* (= *važiòj*) 'travel!'. The absence of shortening in Tverečius *duõs* 'will give' and *važiuõs* 'will travel' as opposed to *jàs* 'will ride' and *dès* '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; McKenzie 1918). These

examples show that Leskien's law never operated in *dẽs*, *jõs*, *duõs*, *stovẽs*, *žinõs*, *važiuõs*, unlike *darìs*, *rašìs*, *sakìs*, 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 *dès* and *jàs* of the easternmost dialects are original and that *dẽs* and *jõs* are analogical (e. g. Pedersen 1933, 14; Petit 2002, 270; Pronk 2012, 236) cannot be correct.

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*, *sukíesi*. In monosyllables, Leskien's law affected the high vowels *-ý-* and *-ű-* only, e. g. *gìs* 'will heal', *bùs* 'will be', *jì* 'she', acc. *jùs* 'you', except in northwestern Žemaitian, where we also find inst. sg. *tọ̀*, acc. pl. *tùs*. The metatony did not reach the westernmost Aukštaitian (and Žemaitian) dialects, where we find *tíe*, *túos*, *túo* with an acute. 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' (cf. Petit 2002, 247–255; and Kortlandt 2002). There are three indications that Leskien's law preceded the Aukštaitian metatony. First, the metatony is a much more local development than Leskien's law. Second, the spread of the circumflex in 3rd person future forms of monosyllabic verbs with a high vowel is taking place before our eyes (cf. Senn 1966, 231; and Petit 2002, 248). Third, the highly frequent form *bùs* 'will be' seems 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 *dẽs*, *jõs*, *duõs*, *stovẽs*, *žinõs* with the recent metatony in *tiẽ*, *tuõs*, *tuõ*, *sukaũ*, *sukaĩ* because Leskien's law was younger than the former but older than the latter. Contrary to Petit's account of my view (Petit 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. **trsenti*, 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, 22–27; 1933, 3–21; Kuiper 1937, 36–40; Kortlandt 1982, 6–8; 1985, 115–117; 2005, 151–153). Both of these formations have exact correspondences in the Old Irish subjunctive, e. g. *-bé* < **b*^{h}*H*$_{3}$*uest* 'be', *fo-ló* < **leugst* 'support', cf. also Greek *φανῶ* 'I will show' < **b*^{h}*H*$_{2}$*nes-*, *ἔφηνα* 'I showed' < **-b*^{h}*eH*$_{2}$*nsm* (adduced by Pedersen 1921, 25 already). The Indo-European origins of the Baltic future have recently been the subject of a careful and detailed study by Eugen Hill (2004). Unfortunately, this author basically follows McCone's theories in his evaluation of the Celtic material (2004, 148–152), disregarding their shortcomings and ignoring the alternatives (cf. Kortlandt 2007 *passim*). Hill rejects the reconstruction of an ablauting *s*-present (2004, 153f.) because he takes Umbrian *ferest* 'will bring' and Oscan *pertemest* 'will prevent' to represent **fere-s-* and **eme-s-*, with the tense suffix following the thematic vowel, instead of **fer-es-* and **em-es-*, with the tense suffix following the root. He states that in the Latin future perfect *ēg-er-ō* 'I will have driven' "das morphologisch dunkle vorlat. **-is-* erscheint" (Hill 2004, 129) instead of a newly created form **ēgesmi* on the basis of a Proto-Italic future **agesmi* (cf. Pedersen 1921, 16; Kortlandt 2007, 152), also *fuerō* 'I will have been', Oscan *fust* 'will be, will have been', Old Irish subj. *-bé*. There can be no doubt that there was an ablauting *s*-present with a zero grade root vowel beside an *s*-aorist with fixed stress on the root and no suffixal ablaut. 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'. Hill does not take the Tocharian evidence into account (cf. Kortlandt 1994, 63f.). The Indo-Iranian *sya*-future is a *ya*-derivative of the sigmatic aorist (thus already Meillet 1900, 309, 317). This new formation evidently replaced the athematic *s*-present. The Slavic remnant of the future participle *byšęšteje* 'future' supports the athematic character of the sigmatic future (cf. already Pedersen 1933, 18). The Russian Church Slavic variant *byšǫšt-* beside more frequent *byšęšt-* can easily have taken its vowel from *sǫšt-* 'being' and *bǫdǫšt-* 'future'. Similarly, Lithuanian *bū́siant-*, *dúosiant-* etc. adopted the vowel of the present participle *ẽsant-*, *dúodant-*.

The circumflex of Latvian *sàls* 'salt' and *gùovs* 'cow' shows metatonical length in **sāl-* and **gōv-* from earlier **seH*$_{2}$*l-* and **g*^{w}*eH*$_{3}$*u-* as a result of an

early lengthening in original monosyllables, as in Lith. *duõs* < **dōs* < **deH₃-* (cf. Kortlandt 1985, 118f.). This is in agreement with Vedic monosyllabic *gáus* < **gʷōus*, acc. sg. *gā́m* < **gʷōm* 'bull, cow' (cf. Lubotsky 1995, 226), like *dyáus* < **diēus*, acc. sg. *dyā́m* < **diēm* 'sky', but not with Greek βοῦς, ναῦς, where the circumflex points to disyllabic **gʷoHus*, **naHus*, unlike Ζεύς < **dieus*, similarly Vedic disyllabic *náus* < **neH₂us* (cf. Lubotsky 1995, 229) and *mā́s* < **meH₁ns* 'month', unlike *mā́s* < **mēms* 'flesh'. The laryngeal was lost with compensatory lengthening in the acc. sg. ending **-aHm* in Lithuanian *-ą* (with a circumflex), Vedic *-ām*, Greek *-ᾱ́ν*, Old High German *-a*, also in the acc. pl. ending **-aHns* in OHG *-ā* and without compensatory lengthening[1] in Greek (Cretan) *-ανς*, but not in Lith. *-às* (where the acute was preserved up to Leskien's law) and Vedic *-ās* (where the nasal was vocalized). It follows that the form **gʷōus* cannot have developed phonetically from **gʷoHus* and that the lengthened grade must be of analogical origin. I used to assume that the long vowel spread from **diēus* to **nēH₂us* and **gʷēH₃us* and that the laryngeal was lost after the long vowel in Indo-Iranian and Balto-Slavic, but not in Greek, where the circumflex points to its preservation (Kortlandt 1985, 118; followed by Schrijver 1991, 129; and Nassivera 2000, 58). There are two problems with this view. First, the motivation for the spread of the long vowel is unclear. Second, nom. sg. **diēus* appears to replace an earlier form **deius* on the basis of acc. sg. **dieum* (thus already Kortlandt 1985, 118), cf. Vedic *devás* < **deiuos* 'god'. It is then probable that the lengthened grade is the result of monosyllabic lengthening in both **diēus* and **diēm*, and similarly in acc. sg. **nH₂ēm*, Greek (Doric) νᾶν,[2] where it never reached the nom. sg. form **neH₂us*. If this is correct, the length in **diēm* and **nH₂ēm* has nothing to do with the loss of the **u* in **-eum*, which may have preceded the lengthening. We may then surmise that **gʷeH₃um* became **gʷeH₃m*, yielding **gʷēH₃m* and eventually Vedic *gā́m*, analogically

[1] Thus already Bernabé 1990; for the implications of this view see Nassivera 2000, 63–68. If **-hr-* lost its aspiration before a following consonant in Proto-Greek, e. g. in dat. pl. χερσί 'hands', χέρνιψ 'spinner', χερνῆτις 'water for ablution' < **ǵʰesr-*, also in πτέρνη 'heel' < **-hrn-* < **-rhn-* < **-rsn-*, Gothic *fairzna*, it appears that we are left without any evidence for Osthoff's law.

[2] Dr Lucien van Beek points out to me that the form νᾶν is unattested while the reliability of the analogical nom. sg. form νᾶς (Herodian, "παρὰ δωριεῦσι") is questionable. Both forms may be the creation of grammarians.

nom. sg. *gáus*, and Greek βῶν. The circumflex of νᾶν and βῶν may have been taken from nom. sg. ναῦς, βοῦς as well as from acc. pl. ναῦς < **neH₂uns*, βοῦς < **gʷeH₃uns* (cf. analogical acc. sg. βοῦν after βοῦς and acc. pl. Doric βῶς after βῶν). In Vedic, the laryngeal was maintained in disyllabic *náus* on the analogy of the oblique stem *nāv-* < **neH₂u-* (cf. Lubotsky 1995, 229) whereas in *gáus* it was lost and the lengthened grade was introduced for disambiguation from gen. sg. *gós* < **gʷH₃eus*. The acc. pl. form *gā́s* was created on the analogy of acc. sg. *gā́m*. Latvian *gùovs* reflects the acc. sg. form **gʷēH₃m*, like *sàls* < **sēH₂l*, which is an original neuter *l*-stem (contra Kortlandt 1985, 119) in view of Old Latin *sale* 'salt', Prussian *sal*, Old Irish *salann* (Middle Irish *sál* 'sea'), Tocharian B *salyiye*. Villanueva Svensson objects (2011, 15) to my loss of a laryngeal after a long vowel in Latvian *sàls* and *gùovs* that we find an acute in *nãss* 'nostril', Lith. *nósis* (1) 'nose' < **neH₂s-* (cf. Kortlandt 1985, 19). Note that in the theory presented here all of these words have the vocalism of the acc. sg. form, and the same holds for Latvian *zùoss* 'goose' and *zvę̂rs* 'beast', Lith. *žąsìs* and *žvėrìs*, both of which had mobile stress (cf. Pronk 2012, 216; Kortlandt 2012, 251; 2013, 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.

METATONIJA VIENSKIEMENIUOSE ŽODŽIUOSE

Santrauka

Yra du metatoninio cirkumflekso vienskiemeniuose žodžiuose sluoksniai: ankstyvasis baltų-slavų sluoksnis, atspindimas, pvz., lie. *dẽs*, *jõs*, *duõs*, ir vėlesnis aukštaitiškasis sluoksnis, matomas, pvz., nom. pl. *tiẽ*, acc. pl. *tuõs*, instr. sg. *tuõ*. Leskieno dėsnis yra vėlesnis už pirmąjį, tačiau ankstesnis už antrąjį sluoksnį. Pateikiama analizė remiama ne lyginimu su slavų ar kitomis indoeuropiečių kalbomis, bet pačių rytų baltų kalbų duomenimis.

Baltų futūras atspindi dvi ide. paradigmas: *s*-prezensą su kilnojamu tarp priesagos ir galūnės kirčiu ir *s*-aoristą su pastoviu šaknies kirčiu ir balsio pailgėjimu vienskiemenėse 2 ir 3 sg. formose. Abu dariniai turi tikslius atitikmenis s. airių kalbos subjunktyve. Abu turėjo egzistuoti ir baltų prokalbėje, kaip rodo pr. *teīks* 'daryk!' greta *postāsei* 'tapsi'.

La. *sàls* ir *gùovs* cirkumfleksas rodo metatoninį ilgumą, siejamą su pailgėjimu vienskiemeniame žodyje. Nėra pagrindo postuluoti nei fonemą **a* žodžiuose *sàls*, *zùoss* ir *nãss*, nei balsį **e* žodžio *gùovs* ide. paradigmoje, nei ide. pastovaus kirčio paradigmą žodžiams *gùovs*, *nãss*, *zvę̂rs*, nei pirminės nom. sg. formos priegaidės apibendrinimą žodžiuose *sàls*, *nãss*.

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