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WINTER'S LAW AND ETYMOLOGIES, WITH SPECIAL REF-ERENCE TO LITHUANIAN*

In the three decades since Werner Winter's statement (Winter 1978) of the sound law which bears his name, a sufficient amount of supporting data has accumulated (see Young 1990; Rasmussen 1999a [1992]; and Dybo's extensive 2002 survey) to suggest that Winter's observation be accepted as a diagnostic tool for reconstructive accuracy (Rasmussen 1999a [1992], 538) and considered by lexicographers in arranging the Baltic and Slavic material of Indo-European compendia. This desideratum is now reflected in the LIV (which applies Matasović's modified version of the law), and in the ongoing Leiden Indo-European Etymological Dictionary series, in particular Rick Derksen's 2008 Etymological dictionary of the Slavic inherited

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¹ Essentially, a PIE sequence of short vowel (or diphthong) and aspirated stop remains short in Balto-Slavic, while a short vowel or diphthong before a voiced stop is reflected as a lengthened (specifically acute) vowel (diphthong). According to Hamp 1998, 322 and Huld 1996, 116, Winter's law also holds for Albanian, and is thus another piece of evidence for an Albanian-Balto-Slavic grouping.

² To this material we can add the following, which seem not to have entered the literature: Slavic *zadъ 'rear end' (Ru. 3að; Cz. zád' and SCr. adj. 3ầðωu confirm an expected acute) to Gr. (Hes.) χόδανον 'rump', Av. zadah- 'rump', OInd. hadati 'defecate', EIEC 187 *ģhed-ie/o-, *ģhed-e/o- 'defecate', see also Vasmer II 73; and perhaps Ru. πωίκα 'ski', Pol. lýżwa 'skate; runner (of sled)', if we accept Brückner's comparison with Gr. λύγος 'twig' (1957, 316).

³ I thus disagree with Petit's statement: "...il faut bien reconnaître que la loit de Winter, même pour ses partisans, en est encore à son stade expérimental; il serait prématuré, me semble-t-il, de l'utiliser comme argument dans une analyse étymologique" (2007, 357, fn. 44). Various objections to Winter's law (most recently Patri 2005) have been addressed in publications such as Kortlandt 2007 and Derksen 2003 (which Patri seems unaware of) and will not be considered here.

lexicon (a Baltic volume by Derksen is expected to go to press later this year), which operates with an unrestricted formulation of the law. In the present paper, I consider the application (or lack thereof) of Winter's law in another fairly recent compendium, the *Encyclopedia of Indo-European Culture* (henceforth EIEC), edited by J. P. Mallory and D. Q. Adams. A review of the EIEC from the standpoint of Winter's law presents the opportunity to discuss some problematic comparisons and to highlight an underappreciated motivation for a set of exceptions to the law.

To an extent, Winter's law is taken into account by the EIEC; for example, the entry *kergh- 'bind' (65) notes that "the Lithuanian form necessitates a PIE *kergh- rather than *kerg- since the latter should have had Proto-Baltic lengthening by Winter's law"; under *tagós 'leader' (348) we read: "compare Lith. patogùs 'agreeable, ordered [convenient, comfortable]4' (the long vowel in Baltic is regular before an unaspirated voiced stop)"; under $h_a \acute{o} geh_a$ -'± fruit, berry' (63) we find that "the Baltic [Lith. úoga, Latv. uôga] and Slavic [*jagoda] forms show long vowels because of the regular lengthening of any vowel in these stocks before a PIE voiced stop"; Lith. srúoga 'skein' "with lengthening via Winter's law" is compared with Gr. ὁέζω and OInd. rájyati (EIEC 113 *(s)reg- 'dye'); and Lith. drégnas 'humid' is excluded from the set Lith. dragės 'dregs', Latv. dradži 'remains of cooked fat', OCS droždije 'dregs' (to EIEC 170 *dhrogh- 'dregs') "as it indicates *g and not *gh (Winter-Kortlandt Law)". In one case, Winter's law is even invoked unnecessarily: under * $pisdo/eh_a$ 'vulva' (507) we find Lith. pyzda, Latv. $p\bar{\imath}zda$, Ru. pizda, Pol. pizda 'vulva', with the note "Balto-Slavic with lengthening of -i- to $-\bar{\imath}$ - by Winter's Law", although the operation of Winter's law is blocked in clusters containing an -s- before the voiced stop: see Kortlandt 1988, 394 (with regard specifically to the -zd- of Lith. lìzdas 'nest' < *ni-sd-) and Dybo 2002, 480f.6 Hamp's analysis (1968) of Slavic pizdá as *peisd- (containing the

⁴ Standard meanings in modern Lithuanian (following Piesarskas 2006) are given in brackets when these differ somewhat from cited glosses.

⁵ Snoj 2007, 221 adds S. Sl. dial. *tážiti (Slovene tážiti 'console', Croat. tầžiti, Čak. tãžit 'quench') 'lenire, consolari' to this set, which includes Gr. τάσσω (*tag-) 'arrange, put in order'.

 $^{^6}$ Other -sD- forms which have not entered the literature include Lith. strãzdas, OPr. tresde, Latv. strazds, Ru. $\partial pos\partial$ to EIEC 582 *trósdos 'thrush'; the *o-sd- (assuming an etymon parallel to *ni-sd-, whether connected to EIEC 80 * h_2 ósdos 'branch' or not) of Ru. dial. $\acute{os}\partial a$ 'поперечная балка на барже; средняя банка (скамья) большой лодки':

zero-grade of *sed-) is thus confirmed; the Baltic forms are borrowings from Slavic: ME III 236.

But the editorial practice of the EIEC with regard to Winter's law is inconsistent, the decision whether to consider it apparently resting with the contributor (D. Q. Adams and R. S. P. Beekes, for example). In a number of cases, Baltic material is arranged under a headword without regard for the operation of Winter's law. In the following, I consider a selection of lexical entries from the EIEC in which Baltic data, following Winter's law, should appear elsewhere, or the etymon itself should be revised to reflect the effects of the law.

* * *

Lith. *vérgas* 'slave (also 'bondsman' [Mielcke 325: 'leibeigener Knecht'])', Latv. *vę̂rgs* 'slave' are adduced, together with Lith. *vãrgas* 'hardship, misery' and Latv. *vãrgs* 'ailing, infirm', under *h_{2/3}uergh- 'commit a crime' (EIEC 141). But the acute of Lith. *vérgas* (to which we can add the reduced grade (pa)vìrgti 'become a slave, submit; subjugate, enslave') and Latv. *vę̂rgs* cannot be derived from a form with stem-final *-gh-, and the appeal in the entry to a "lengthened grade" *uērghos is ad hoc. But even within the "misery/infirm" set (which is unambiguously circumflex in Lithuanian: vãrgas (4, 2) 'hardship, misery', vargùs (4) ~ vãrgus (2) 'hard, difficult', vãrgti 'live in poverty'), Latvian shows sustained-tone acute in the adjective vãrgs and verb vãrgt 'be ailing, pine (waste) away', alongside distinctive falling tone vargt in the three-tone Vidzeme area (see ME IV 503f. and EIV III 677 for all forms). Ērģeme savargt 'grow sickly' (EIV III 323) matches Lith. suvargti 'be tired, worn out; become impoverished' in its falling tone. The remaining data from Latvian are tonally ambiguous: the forms vargs and vargt⁸ are found in

Vasmer III 125; OSerb. gvozd 'forest', OPol. gwozd 'mountain forest', both to *guésdos 'branch' (EIEC 80, where the Slavic forms are described as "o-grade with collective meaning"); OCS dъždь, Ru. δοжδь 'Regen' to *dus-dyus 'bad sky' under EIEC 43 *dus- 'bad', see also Derksen 2008, 131; and Lith. vizgà, gen. vìzgos 'sedge' (whatever its formal relationship to the doublet viksvà): Lat. virga (*uiz-gā) 'twig, switch' (Fraenkel II 1269).

⁷ The Old Prussian adjective wargs 'evil' and deadjectival noun wargan 'evil', together with the prosodically mobile Slavic set represented by Ru. dial. εόροε 'enemy, foe; the devil', add no additional tonal information.

⁸ Written by ME with a "2" superscript (omitted in Fraenkel II 1199, Mažiulis IV 222, and the EIEC entry), indicating that the form is known from dialect areas with only two, rather than the classic three, tones.

the eastern dialect area in which a falling tone can represent either original falling or sustained tone, while the western (Kurzeme) dialect area, in which falling and broken tones have merged, presents $v\hat{a}rgs^2$, $v\hat{a}rgt^2$. Since there is no unambiguous evidence for a specifically broken-tone acute for this base in Latvian, we might suspect that the $v\hat{a}rgs/v\hat{a}rgt$ of Kurzeme represents the original circumflex found in $\bar{E}r\dot{g}eme~(sa)v\dot{a}rgt$, preserved in Lithuanian.

Like the EIEC, Derksen 1996, 73f. follows Fraenkel II 1225 and Endzelin ME IV 539 in assuming the identity of the vérgas/vergs and vargas/ vārgs sets, and posits an original acute base possibly cognate with Goth. wrikan 'to persecute', wraks 'persecutor', OE wrecan 'to chase, drive, avenge' (see Feist 1939, 573 s. v. wraks), i. e. LIV2 697 *ureg- 'einer Spur folgen (> verfolgen)', EIEC 284 *ureg- 'track, hunt, follow'. The circumflex of Lith. vargas and the falling-tone forms of this base in Latvian are seen as resulting from métatonie douce occasioned by an East Baltic retraction of stress from word-final *-a in the original end-stressed neuter noun *varga (Derksen 2008, 528). The verb vargti (Latv. (sa)vargt) then, as a denominal, would owe its tone to the secondary circumflex of the noun.9 But this approach raises some questions: the expected sequence *uerg- does not otherwise occur (though it could be a Balto-Slavic "neo-guna" remaking of the *ureg- found in Germanic); the verbal vargti (Latv. (sa)vargt) could be directly deadjectival, as Mažiulis (IV 222) suggests; finally, the semantics seem to be lacking: it isn't quite clear how the notion of "persecute, pursue" would develop into either "slave, bondsman" or "misery, infirm; (OPr.) evil¹⁰; (Sl.) enemy".

For these reasons, I believe we need to distinguish two unrelated bases, one circumflex ("misery, etc.") and one acute ("slave"). The "misery; infirm; evil" set (together with Slavic *vôrgv 'foe'), as a circumflex base, is properly adduced under the above EIEC etymon, with a semantic development perhaps through the sense of "ostracized" which occurs in e.g. Med. Lat. vargus (from Old Low Franconian) 'one who is expelled for a crime; highwayman, bandit' (EIEC 141). The "slave" set would find the expected stem-final voiced non-aspirate in EIEC 649 *µerģ-'work', briefly considered by Derksen (1996, 74). The problem with this identification, as Derksen notes, is the palatovelar, but

 $^{^9}$ Dybo 2002, 457f. also assumes the identity of the *vérgas* and *var̃gas* sets, but offers no explanation for the circumflex of the latter.

¹⁰ Old Prussian also attests senses parallel to those of East Baltic in *powargewingiskan* (adj., acc.sg.masc.) 'miserable, wretched', *powargsennien* 'misery ["Jammer"]'.

in this case the need for a Winter's law solution (as the "lesser of two evils", so to speak) would outweigh this consideration: failure of an expected satam reflex, whether due to phonetic conditioning or not, is well-known in Baltic and Slavic: cf. doublets such as (Lithuanian, unless otherwise marked) pēk [us] '(Klein)vieh': pèš [ti], paš [ýti] 'pluck (feathers, wool)', krèkti (also krekéti, krēka): krèšti (also krešéti, krēši) 'coagulate'; curdle', gnýbti: žnýbti 'pinch, tweak', akmuō 'stone' ~ ašmuō (usually pl. āšmenys) '(cutting) edge; blade', OPr. balg [nan] 'saddle': balž [íenas] 'crossbeam (of sled, etc.'), kleīvas ~ šleīvas 'bow-legged', kumpis ~ šumpis 'ham', Ru. клонить ~ -слонить 'to lean'; see the recent review of the question by Mottausch 2006.

The *varg- and *verg- sets have certainly influenced one another, both formally and semantically, leading to the spread of acute in the "misery/ infirm" word in Latvian: indeed, among the meanings for Latv. vārgs, ME IV 504 includes (citing Sprogis) "ein Bedrückter, ein Sklave". In Lithuanian, on the other hand, we find unexpected circumflex (alongside basic acute) in both the noun for "slave": vérgas ~ vergas and the derived verb: (ap-, nu-, pa-, etc.) vérgti ~ vergti 'enslave'. Still another source for acute contamination in Latvian vārg- is a third distinct root, represented by Latv. savergt(ies) 'einschrumpfen', with sustained-tone acute in Vec-Piebalga (EH VI: 465), related by Endzelin to Lat. vergere 'sich neigen', OInd. várjati 'wendet, dreht' (= LIV²: 290 * h_2 µerg- 'sich umdrehen, sich wenden'). Lith. vérgas, -à 'clever (LKŽe 'gudrus, suktas')' also belongs here: the semantic development is suggested by sùkti'drehen, wenden': sùktas' gewunden, gedreht; betrügerisch, verschlagen' (Fraenkel II 939). This latter set, which includes Slavic 1 sg. *vьrgo, 3 sg. *vьržetь, inf. *vьrći 'throw' (Dybo 2002: 457), also owes it acute to Winter's law.

A second problematic assignment is Lith. $m\acute{e}\check{z}u$ and Latv. $m\^{e}zu$, adduced alongside Lith. $min\check{z}\grave{u}$ (this form, minus the diacritic, is only Old Lithuanian; modern is pres. $my\check{z}\grave{u}$, $me\check{z}\grave{u}$, inf. $m\check{y}\check{z}ti$, i.e., $m\check{i}\check{z}ti$), Latv. $m\bar{i}zu$ (sic, for pres. $m\grave{e}znu$, $m\bar{i}\check{z}u$, inf. $m\grave{i}zt$), under $*h_3m\acute{e}i\acute{g}he/o-(*h_3min(e)\acute{g}h-)$ 'urinate' (EIEC 613). D. Q. Adams follows Trautmann (1923, 185; similarly ESSJa 18, 24) in confusing two distinct roots here: while $m\check{y}\check{z}ti/m\grave{i}zt$ does indeed mean 'urinate', Lith. $m\acute{e}\check{z}u$ ($m\acute{e}\check{z}ti$) is 'to dung, to take dung (out of a cattle shed, sheepcote, etc.)' and Latv. $m\acute{e}zu$ ($m\acute{e}zt$) 'den Mist fortschaffen, misten; fegen, kehren' (ME II 622). The 'urinate' words are circumflex bases and therefore properly under this lemma, but, assuming Winter's law, the acute 'dung' set cannot be connected. Fraenkel (I 444), Vasmer (II 557), and (in support of Winter's law here)

Rasmussen (1999a [1992], 533) assume productive Baltic ablaut and assign mėžti, mėzt to the acute base of Slavic (Ru.) μάσαπω 'to smear, anoint' (itself a product of Winter's law: Matasović 1995, 64), i.e. EIEC 649 ?*maģ- 'work with the hands, form, shape [dough]' = LIV₂ 421 *maģ- 'streichen, schmieren'. Karulis 586f. suggests the Baltic semantic development "smear (with), apply (in clay-working) >> spread manure". In support of this development, note OCS pomazati, which in addition to 'salben, beschmieren, bestreichen' can also mean 'fett machen, düngen' (Fraenkel I 444).

A third problematic assignment is Lith. vadinù 'call, name; invite', adduced under *ued- 'raise one's voice' (EIEC 535). This lemma includes the Slavic set of väditi, with meanings such as "accuse, slander" and also "lure, goad", apparently reflecting Winter's law (but see below), while Lithuanian vadinti, with its short root, should not be related. Fraenkel (II 1177f.) finds the etymology of vadinti "umstritten", and (while noting Slavic *vad-) considers a possible relation to vèsti 'lead' (*uedh-), citing Latvian parallels for the semantic development: Latvian offers a formal cognate in vadinât, meaning both 'hin und her führen' and (dial.) 'anspornen, überreden; mitzukommen auffordern; auffordern'. The related vedinât has the meanings 'freqn. zu vest, führen' as well as 'einander führen, locken; invite, allure'. Since Lith. vadinti overlaps somewhat in these meanings: "kviesti, skatinti, raginti ar reikalauti kur atvykti" (LKŽe), as does Slavic vaditi, the common link may be something like a causative of "lead": "get to lead, get to come, urge to go, etc.", and perhaps from here to "call", and then "name". Although the semantic development is not quite clear, vadinti might provisionally be arranged with EIEC 525 *uedhe/o-'lead', see Karulis 1098 s. v. vadît.

Alternatively, vadinti might remain under an EIEC *ued- adjusted to a laryngeal-final stem (cf. LIV² 286 * h_2uedH - 'tönen, sprechen'), ¹¹ if the -dH- is seen as merging with an aspirated stop (i.e., no Winter's law reflex, although this would create difficulties in turn for the apparent Slavic cognate vaditi). The relevant data are inconclusive: assuming the accuracy of the lemmas in LIV², we have *reudH- 'schreien, weinen' (508): Lith. ráudu (raudóti; here also Slavic *rydati 'weep, wail': Derksen 2008, 441) 'wehklage' and * $g^h rebh_2$ - 'ergreifen' (201): Lith. grébiu (grébti) 'an sich reißen; rechen', OCS grabljo (grabiti) 'raffen, ergreifen', which are acute bases by Winter's law. On

¹¹ Smoczyński (2006, 185) proceeds from such a root in reconstructing for *vadinti* (earlier and dialectal *vadýti*) an *o*-grade causative-iterative $*h_2 \mu o d H$ -eie-.

the other hand, short vocalism is preserved in Lith. $ked\hat{u}$ (-éti) 'bersten' to *(s)kedh₂- 'zersplitten, zerstreuen' (550) and also in BSl. *ved- 'lead' (EIEC 525 * μ edhe/o-), if we follow Hamp 1988, 181 in reconstructing the etymon of as * $H_e\mu$ edH-. The question requires further investigation.

Still another problematic assignment is Lith. springstù 'choke; become choked or obstructed', Latv. sprañgât 'cord, constrict [ME III 1010 '(ein)schnüren, einsperren'], adduced under *(s)pre(n)g- 'wrap up, constrict' (EIEC 644). Entry contributor D. Q. Adams says of these and cognates Gr. σπάργω 'swathe in swaddling clothes', MHG phrengen 'oppress', TochAB pränk 'restrain oneself, hold back': "these words would all appear to belong together, despite the lack of an exact phonological match". But the lack of a Winter's law reflex would nevertheless exclude the Baltic data from this set. While Latvian sprangât, sprengt 'fest zuschnüren' at first glance appears to be an acute base, the preservation of tautosyllabic -n- points to a Couronianism, and a sustained tone in these may indicate a Baltic circumflex (Illič-Svityč 1964, 24f.). Since Lith. spriñgti is in ablaut relationship with spreñgti, -ia 'squeeze (in, into), thrust (in, into); stretch, tighten', which is also circumflex,12 the set should be placed under the same head as English 'spring', in this case EIEC 284 *spergh- 'move energetically', or more precisely LIV² 583 *(s)prengh-'springen', where these forms are indeed found.

* * *

Lith. dubùs 'deep', Latv. duôbjš 'deep' [both also 'hollow, sunken'] appear under *dheub- 'deep (EIEC 154); Lith. dumblas 'silt' is also adduced here. In his survey of Winter's law, Dybo (2002: 499 №11; 424 №2) treats the acute full-grade forms of Latv. duôbjš and the Lithuanian transitive dúobti (pres. dúobia) 'to hollow out', 13 to which we can add dúoba 'hollow of a tree', as regular products of Winter's law. The unexpected short root vocalism of the corresponding Lithuanian intransitive-inchoative dùbti, pres. dumba, past dùbo 'grow/become hollow/sunken' reflects, according to Dybo (2002, 498f.), a failure of the law to operate "in a number of Lith. verbs forming praes. stems

¹² According to Dybo 2002, who takes the acute here to be primary: "spreñgti, sprengiù can be explained by the *j*-metatony". But such metatony, while widespread in *i*-stem verbs such as žiūri (Stang 1970, 224), is not expected in *ja*-stem verbs: *jùngia*, spréndžia, skùndžia, ráugia, mélžia, láužia, úodžia show no tendency toward circumflex.

¹³ The expected full grade transitive $*d\acute{e}ub$ - would have resulted in a too-dissimilar $*d\acute{z}i\acute{a}ub$ -.

with n-infix and also Slav. verbs with n-praes. (of different kinds) ". In such cases the non-acute vocalism of the present has been extended analogously to the infinitive and preterit. The short root vowel of dubu (repeatedly presented in the literature as an exception to Winter's law) is viewed as a possible back formation from dubti.

Dybo's observation regarding the absence of Winter's law in Baltic nasalpresent bases is a significant insight which warrants further refinement: what has hitherto been largely lacking in the discussion of Winter's law and its exceptions is an appreciation of the role of productive ablaut in Baltic (and mutatis mutandis Slavic). The Baltic verbal system is characterized by an ablaut-based opposition in which transitive stems often show full (e-) grade root vocalism, -ie/o presents, and \bar{e} -preterits (e. g. $ke\tilde{i}\check{c}ia$, $ke\tilde{i}t\dot{e}$ 'to change (tr.)'), while the semantically corresponding intransitives, with inchoative meaning, are characterized by short (or reduced grade) root vocalism, n-infixation in the present, and ā-preterits (e. g. kiñta, kìto 'to change (intr.)' (Stang 1942, 124, 131f.; 1966, 309, 356, 395; Kazlauskas 1968, 316-336; Kuiper 1937, 178-190). The infixed present-tense stems always show circumflex tone, regardless of the tone of the infinitive: cf. $k\tilde{y}la$ (i. e., $k\tilde{l}a < kl-n-l-a$): kìlti 'to rise' (Kazlauskas 1968, 318).14 According to Rasmussen (1999b [1992], 546), the origin of the non-acute nature of the infix can be found in laryngeal bases in which the laryngeal was lost in prevocalic position: "A regular nasal present from the root *kelh- would be *kl- $n\acute{e}$ -h-ti/*kl-n-hénti, i.e., when thematicized, a Balto-Slavic *kiln-e-ti with no trace of old laryngeal. When the nasal element was now moved to the position before the final consonant of the synchronic root (as in the type lipti limpa 'climb'), *kilna changed to *kinla, still with a short semi-diphthong and therefore a circumflex tone".

From sonorant bases like kilti (past kilo) we can envision an extension of an infixed $-\tilde{n}$ - to obstruent stems, including those with original acute root vocalism (of whatever origin) preserved in the corresponding transitive: Lith. intr. (s) $ki\tilde{n}da$ (skisti, skido) 'become flimsy, thin; become frayed': tr. s $kied\check{z}ia$ (skiesti, s $kied\dot{e}$) 'dilute' (a Winter's law base: Dybo 2002, 435); Lith. intr.

¹⁴ Lith. *jùngti, jùngia* 'join', with its transitive meaning and pre-Baltic infix (spread throughout the paradigm and beyond to the related noun *jùngas* 'yoke'), rather than the Baltic infix from suffixal –*n*- (with reflexes in Slavic and Germanic), falls outside of this system (Kazlauskas 1968, 318; Stang 1942, 60) and the acute occasioned by Winter's law is preserved.

[Jaryngeal base?], with eventual semantic specialization. For some intransitive bases, these n-infixed forms compete with -sta formations of later productivity in which the prosodic characteristics of the root are preserved throughout: Lith. intr. skýsta (skýsti, skýdo) 'liquify', trúksta (trúkti, trúko) 'lack, be lacking; burst'. Kazlauskas (1968, 326) lists a number of such doublets and sees their origin in an earlier mixed set such as *trúkti, truñka, trúko (my example) with a levelling out into two new paradigms, trùkti, truñka and trúkti, trúksta. According to Kazlauskas (1968, 327), the circumflex of the infixed intransitive can even come to displace the original acute of the correlated transitive stem: skleisti, skleidžiù 'spread' owes its tone to the intransitive skliñda (the Latvian cognate skliëst, 1 pres. skliěžu, 1 past skliědu preserves the original Winter's law acute: Dybo 2002, 436f.).

We have then, within Baltic verbal ablaut patterning (the productivity of which has continued down through the Lithuanian dialects, cf. liñka for liẽka 'remains' and sniñga for sniẽga 'snows'), a mechanism for the development and extension of circumflex/short vocalism in an original acute base. This process undoubtedly accounts for the many instances of East Baltic circumflex found in the acute duob-/daub- root (cf. Lith. skleidžiù but Latv. skliẽžu, noted above): Latv. dùobjš (ME I 531; EIV I 284); Latv. tr. dùobt 'hollow out' (in the Lithuanian cognate duōbti, -ia, -ė, ¹s also daūbti, -ia, -ė, circumflex is primary, alongside acute dúobti); Lith. duobē (acc. sg. duōbę) 'pit; hole; hollow' = Latv. dùobe 'die Höhlung, Gruft, Grube; das Beet' (ME I: 531); Lith. daubà (acc. sg. daūbą) 'ravine; hollow; gully ["deep/sunken place"]' (but Latvian daūba with acute), and Lith. duobà (4~2) 'hollow of a tree', alongside the acute dúoba noted above.

Such a development also suggests itself for Lith. $lig\grave{a}$ 'illness; disease', Latv. liga 'severe illness, pestilence', adduced under EIEC 516 * $h_3 ligos$ 'ill, bad'. The cognates include Gr. $\grave{o}\lambda \acute{\iota}\gamma o\varsigma$ 'few' and ("with loss of h_3 — as sometimes before *-o-") $\grave{\lambda}o\imath\gamma\acute{o}\varsigma$ 'ruin, harm, death'. East Baltic $lig\grave{a}/liga$, with its short root vocalism, has repeatedly been cited in the literature as a counterexample to Winter's law, prompting seemingly unnecessary phonological modifications to the law—see for example Rasmussen 1999a [1992], 536; Matasović

¹⁵ Dybo 2002, 424 fn. 61 explains the circumflex of Lith. *duõbti*, *-ia* as resulting from "*j*-metatony", but this is unlikely—see above, footnote 12; moreover, it does not account for the other instances of circumflex.

1995, 65; and Dybo 2002, 505, who treats it as an example of "weak position of length" with a sporadic shortening of $\bar{\iota}$ and $\bar{\iota}$ when preceded by $\bar{\iota}$, l-, r- $(CR\bar{\iota}/\bar{\iota}C > CR\bar{\iota}/\bar{\iota}C)$.

But Derksen (2003, 11) is surely correct in suggesting that the short i of ligà is secondary. Like *dub-, East Baltic *lig- is part of a productive derivational ablaut set that includes (in Lithuanian) the full-grade verb liegti (3 pres. liegsta, past liego) 'be seriously ill, waste away' (preverb forms include nuliegti dial. 'get/be exhausted; grow faint', paliegti 'be taken ill, fall ill; become feeble'), with acute by Winter's law. A reduced grade doublet (su)ligti, -o is cited in the LKŽe with an apparently unattested present (marked with "?") linga. The reduced grade is also found in the denominal adj. ligùistas (dialectally ligótas, ligūstas, ligūostas) 'ailing, sickly' and the noun ligónis 'patient'. East Baltic ligà/liga then is not directly comparable to the Greek ὀλίγος, but represents a deverbal derivative of ligti, itself a reduced-grade doublet emphasizing inchoative meaning, of the Winter's law form liegti.

Lith. (dial.) beñgti 'to finish, end', Latv. bèigt 'end' is adduced under *bheg-(pres. *bhenégti) 'break' (EIEC 81), the semantic connection being "break off" (Fraenkel I 34). Latv. bèigt is not a precise match for Lith. beñgti; it represents (like the Lithuanian variants E. Lith. beñgti, -ia, -è and standard bañgti, -ia, -è) a secondary transitive full grade apparently to a reduced grade *big- (which continues in Lith. dial. bìgas 'short; dock-tailed' < "broken off") extracted from an intransitive *bi-ñ-g-, itself a reanalysis (by analogy to nasal-infixed inchoatives) of *b-in-g- < pre-Baltic *bng-16. The latter, in turn, represents a Baltic reduced grade to *beng-, in which the -n- (unlike the Baltic infix of inchoative dumba, etc.) continues a generalized nasal present of Indo-European (rather than Baltic) origin: "Ved. [bhanákti 'breaks'] und balt. ist aus dem Nasalpräsens eine nasalhaltige Wurzel *bheng- abstrahiert" (LIV²: 66). An o-grade is found in the noun pabangà (= pabaigà) 'end'.

But unlike the transitive *jùngti* 'to join; unite; yoke, harness', another Winter's law stem with a generalized infix of Indo-European origin, *beñgti/biñgti* has been adjusted to the productive ablaut system of Baltic, its infix being identified with that of the intransitive-inchoative class; it therefore lacks

¹⁶ Perhaps continuing in a transitive sense in Lith. (nu)biñgti, -ia, -ė in the sense of "kill" (< "put an end to, finish off"): LKŽe 'mušti, galą daryti; numušti; užmušti, nudėti"; the sense of šérti ['feed'] mentioned here by the LKŽ must have developed as a transitive counterpart to the biñgti, -sta, -o of different origin, mentioned below.

the acute expected by Winter's law (and the related bigas shows a short root), a trace of which is nevertheless found in Latv. beigas (pl.) 'end'. The generalized circumflex may have been furthered by confusion with the circumflex of the intransitive reduced-grade base *biñg- of Lith. biñgti (biñgsta, biñgo) 'erstarken, überhandnehmen', past act. part. binges 'muthwillig, eingefüttert, wie ein Pferd' (Mielcke 27; no tone is noted), bingùs (bing-) 'mutig, kühn, stattlich', prabiñgti 'reichlich werden, anschwellen, übertreffen' and its ograde derivatives prabangà 'luxury, splendor', bangà (4) 'wave'. 17 Pokorny 115 (under *bheg-, bheng- 'zerschlagen, zerbrechen') and Fraenkel I 34 include these in the set of "break", but the semantics seem too far removed for this connection to be plausible. 18 Instead, we might again assume a centum treatment of a palatovelar and, following Boisacq 1916, 753 ("lit. bingus 'superbe', épith. du cheval, présente une vélaire"), assign these forms to EIEC 3 *bhénghus (*bnghous) 'thick, abundant' and its original verbal base *bhengh- 'draw together, be thick'. Cognates here include Latv. biezs 'thick, dense, heavy' (with expected satom reflex of the palatovelar and circumflex tone in an aspirate base), bìezt (1 sg. pres. bìezu) 'gerinnen, dick werden' (ME I 306f.), Gr. παχύς 'thick, compact', and OInd. bahú- 'much, many; numerous, compact; abounding in, rich in', all of which accord well with the semantics of Lith. (pra)biñgti, (pra)bangà. The sense of "wave" for Lith. bangà would have developed along the lines of "compact mass" seen in the ON bingr 'heap', OHG bungo 'lump'. We are thus dealing with two distinct roots: a Winter's law acute *béng-/béig- to *bheg- (pres. *bhenégti) 'break', with secondary circumflex by association with intransitive/inchoative infixed verbs (Latv. beigas preserves the acute), and a circumflex *bang-/bing- as a centum treatment of *bhénghus/*bnghous 'draw together, be thick'. (Also distinguishing these two roots, but with a different etymological analysis, is Urbutis 1981, 95-104.)

The EIEC arranges Lith. $(u\check{z})$ -mìgti 'fall asleep' and Latv. $(\check{z}aiz)$ migt [sic: correct to $(\grave{a}iz)$ migt] 'fall asleep', miêgt 'close the eyes [sic: 'press, squeeze']' under *meigh- \sim *meik- 'close the eyes' (109). The Lithuanian and Latvian verbal root for "sleep" (to be distinguished from *sapn- 'dream') presents a

¹⁷ Latv. *bañga* 'billow, wave' is a Couronianism, in which the sustained tone undoubtedly reflects a Baltic circumflex: Illič-Svityč 1964, 24f.; the native development in found in *buoga* (without tone), *buôgs*² 'der Haufen, die Schar, etc.', ME I 361.

 $^{^{18}}$ Dybo 2002, 473f. takes the traditional approach and treats the entire group together; no solution is offered for the unexpected circumflexes.

variety of present-tense formations, representing both an *n*-infixed reduced grade (proper to the inchoative *mìgti/migt*) competing or conflating with a non-infixed full grade: Lith. *miñga* (dialectal *miĕga*, *miĕgta*, *miĕgsta*, *miĕgti*, *miĕnga*: LKŽe) and Latv. *mìegu*, for earlier **mìgu* < **mìngu* = Lith. *mingù* (ME II 624). The reduced grade is also found in the Lithuanian causative *mìginti*, *migdýti* 'lull to sleep' and in *mìgis* 'lair, den ("sleeping place")', while the full grade (-*e*- or -*o*-) appears in the stative *miegóti*, pres. *miĕga* (again, with numerous dialectal variants, including *miĕgsta*, *miĕgti*, *miĕnga*) 'to sleep', Latv. *mìeguôt* 'Schläfrigkeit spüren; schlafen, schlummern' (ME II 652) and the deverbal (Smoczyński 2005, 237) Lith. *miĕgas*, Latv. *mìegs*, OPr. *maiggun* (acc.) 'sleep'.

These forms, which are non-acute and therefore suggest the above etymon *meigh-, are generally related (and the EIEC follows this practice) to the set of Latv. miêgt 'press, squeeze'; maîdzît 'to press repeatedly, knead'; Lith. mýgti 'press, squeeze'; míegti (miēgti), -ia, -ė 'ache; strike'; máigyti 'crumple; crush; trample' with related maigaĩ (3), máigos 'scattered/spread straw, litter; rakings'. But this Baltic set is uncontroversially acute and therefore cannot be derived from the *meigh- established for mìgti, miēgas. Derksen (1996, 70) therefore proposes that there is in fact no connection between the Baltic "sleep" words and Latv. miêgt, Lith. mýgti.

But the semantic connection between the *meig- and *meig- sets seems sufficiently compelling ("squeeze > press/close the eyes tightly > fall asleep"), as has been recognized by Fraenkel I 447f.; Endzelin ME II 625; Vasmer II 618; and Karulis 589¹9. Within Baltic, we might point to cases in which the same root (either *meig- or *meig-) encompasses both semantic sets, such as Latv. àizmigt 'einschlafen', but also 'zumachen, schliessen' (ME I 40), piemiedzêt (*-meig-) 'schliessen (die Augen)' (ME III 274), and Latv. miêgt acis 'screw up the eyes', miêgt ar aci 'bat an eye'. In addition, Slavic presents a rich set of cognates which encompass both the senses of "squint, blink" (< "squeeze the eyes shut") and "doze": *mьgnoti (formally comparable to Lith. miñga) of RCS (оком, глазом) мгнуть 'blink, wink', Ru. мжить 'жмурить, щурить глаза', Ru. мигать 'blink, wink'; Ru. dial. мжа (*mig-) 'дремота, дрема', мжать 'дремать'.

¹⁹ "Vārda *miegs* mūsdienu nozīme ir sekundāra; primārā laikam ir bijusi '(plakstiņu) aizspiešana, aizvēršana'". Mažiulis (II 46) also connects the two sets but derives **méig*-'squeeze' from **meĩg*-'blink', which means that the acute base would need to be derived from the circumflex, which, as noted above, does not seem possible.

The question, then, is how to relate the Baltic acute and circumflex forms, which seem to represent a single broad semantic set, to a single etymon. For Slavic, ESSJa 21, 182 notes the occasional confusion of two distinct sets, represented on the one hand by $*mb\check{z}iti_1$ 'мигать, жмуриться', which is cognate with the Baltic forms above, and on the other hand $*mb\check{z}iti_2$ 'моросить', which represents EIEC 110 $*h_3meightarrow h_3mightarrow h_3mightarrow h_3mightarrow hist', to which Baltic (Lith.) <math>migl\grave{a}$ and Slavic (Ru.) mzna belong. Reviving a generally dismissed (Vasmer II 619 "вряд ли сюда...") connection between the "squint/sleep" and "fog" sets, the metaphoric extension "становиться пасмурной (о погоде) > туман > > туман в глазах > состояние затемненного сознания" is proposed.

We might accordingly contemplate the influence of the non-acute base of "fog, drizzle" on the "sleep" set in Baltic. But since these two sets are more remote from one another in Baltic than they are in Slavic, it seems preferable to attempt a connection on the basis of Baltic ablaut patterning. In this case, an originally acute full-grade stative present miega (or its athematic counterpart miegti (?*moig-)), representing a semantically specialized development to the e-grade transitive *meig- (cf. Latv. meîgt acis) 'squeeze, press together tightly' would have acquired its circumflex from the corresponding reduced-grade inchoative miñga (mìgti), through forms such as dialectal miẽnga (to both miegóti and mìgti; see above), representing a conflation of *miega and miñga. Similarly, Latvian 1 sg. mìegu (for *miêgu) may be seen as taking its circumflex tone from the infixed *mìgu which it replaces.

This approach, which allows us to maintain the semantic comparison of *méig- 'press' and *meig-, *mig- 'sleep' within Baltic, requires that we adjust the etymon from *meigh- to *meig-, with Winter's law accounting for the East Baltic acute (if the root contained -VH- we would expect a Hirt's law reflex in the Slavic forms). There are, however, no reliable cognates outside of Balto-Slavic which might confirm or disprove this: the Ved. ni-méghamāna-'niederblinzelnd', which would point to a final voiced aspirate, is introduced with a question mark in LIV² 427 (under *meig^{(u)h}- 'blinzeln, zucken'), while MLG, MDu micken 'beobachten', cited by Pokorny 712 (under *meigh-'flimmern, blizeln, micāre'), is not mentioned here.

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A different kind of Winter's law question arises with Lith. $s\bar{u}dr\dot{u}s$ (also $s\dot{u}drus$) 'luxuriant [dense, compact, thick]', to EIEC 235 (with a question

mark) *su-dru- 'good' + 'oak, tree' : *su- 'good'. This entry reflects Fraenkel's comparison (II 937) of the Lithuanian form with OCS sudravu, ORu. sudrovu, and OInd. sudrú- 'starkes Holz, tüchtiger Balken': "Das 2. Glied von lit. sūdrùs und slav. sudravu dürfte eine im Idg. Weitverbreitete Baum-, besonders Eichenbez. enthalten, lit. in der Tiefstufe *dru- (griech. $\delta \varrho \tilde{v}_{\varsigma}$), slav. in der Hochstufe mit o-Vokalisierung aus: su-dorvu'. In his characteristically comprehensive article on sūdrùs, Petit (2004) rejects Būga's dismissal (I 326f.) of this comparison²⁰ and proposes, with some hesitation—since the Slavic cognates do not show the expected lengthening²¹ — that the long $-\tilde{u}$ - of the first syllable of the Lithuanian form is the result of Winter's law. If so, this would be an example an originally initial voiced stop which through compounding and univerbation (Petit, loc. cit., 274 mentions the "opacité" of the resulting form) has become internal and conditions Winter's law.

Petit considers this example unique (274), but there are at least two similar cases involving partial reduplication, each of which points in a different direction. Hamp 1989–90 derives the long acute vowel of Lith. dúodu 'give' by Winter's law from an intermediate *dòdmi, ultimately from the reduplicated present *dédōmi: dedmés (in contrast to dedù 'put' < *dhèdhmi << *dhédhēmi: dhedhmés). Another reduplicated form of Indo-European origin, but this time without the effects of Winter's law, can be found in Lith. dedervinē (also dēdervinē), acc. sg. dēdervinę 'herpes', to EIEC 522 *dedrus 'tetter, skin eruption, leprosy'. Cognates include OInd. dadrú– and OE teter 'tetter, skin eruption'. The Indo-European base is the aniṭ *der- 'tear off, flay' (567) seen in Lith. Žem. derù, diřti 'flay' (Būga II 249). This seemingly constitutes negative evidence for the operation of Winter's law before a root-initial segment and the question of the proper analysis of sūdrùs remains open.

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In insisting on a consideration of Winter's law—a sound law "as important for Baltic and Slavic as Verner's Law is for Germanic" (Rasmussen 1999a [1992], 538)—for a number of problematic Baltic comparisons, I hope to have shed more light on the respective etymologies, and to have accounted,

 $^{^{20}}$ "Лит. $s\bar{u}d$ - $r\hat{u}s$ [в Салантах— $s\hat{u}drus$] не имеет ничего общего с созвучным скр $sudru\check{s}$ 'gutes Holz'".

²¹ For this reason, Derksen prefers Meillet's comparison of the Slavic compound to Skt. $dhruv\acute{a}$ - 'firm, solid', deriving it from a PIE * h_1su - d^hor -uo- (2008, 478f.).

In a less arbitrary way than previous attempts in the literature, for a set of motivated exceptions to the law, like ligà. These apparent exceptions (and the set can easily be extended: Lith. svisti, sviñda, svido 'begin to shine': svýsti, svýsta, svýdo: LIV² 608, ?2. *sueid- 'glänzen', EIEC 514: *sueid- 'shine') result from productive morphological processes of a more recent era in Baltic, a point insufficiently appreciated in the literature. As a corollary, a verbal base which includes a nasal present of Baltic provenience can never be used as a counterexample to Winter's law (similarly Derksen 2007, 43f.). Additionally, some questions have been raised regarding the operation of the law in particular circumstances (stop+laryngeal sequences, word-initial segments); these await a more detailed investigation.

WINTERIO DĖSNIS IR ETIMOLOGIJOS, YPAČ ATSIŽVEL-GIANT Į LIETUVIŲ KALBĄ

Santrauka

Straipsnyje, palaikančiame Winterio dėsnio svarbą baltų ir slavų kalbų etimologijoms, aptariama grupelė lietuvių kalbos *comparanda*, aptiktų Mallory'o ir Adamso veikale *Encyclopedia of Indo-European culture*, ir pateikiama alternatyvių etimologijų, paremtų šio dėsnio taikymu. Be to, pabrėžiamas produktyvios baltų darybinės apofonijos vaidmuo aiškinant akivaizdžias Winterio dėsnio išimtis, tokias kaip lie. *ligà*.

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