WHAT IS STANG’S LAW?

Abstract. Stang’s law is an ambiguous concept. On the one hand, it refers to a retraction of the stress from non-acute long vowels to the preceding syllable in Slavic. On the other hand, it refers to the development of acc.sg. Vedic dyām ’sky’, gām ‘bull, cow’, Greek Ζῆν(α), βῶν, from *dieum, *gʷoum. Stang derived the long vowel from the diphthong before the tautosyllabic nasal consonant. Alternatively, the long vowel can be attributed to monosyllabic lengthening followed by the loss of *‑u‑ before the tautosyllabic nasal.

I have proposed that *‑u‑ was lost before word-final *‑m at a stage before the monosyllabic lengthening, yielding *diēm < *diem < *dieum and *gʷeH₂m < *gʷeH₂um. Latvian gūovs reflects the acc.sg. form *gʷeH₂m with loss of the laryngeal after the long vowel. The paradigm with a full grade suffix *‑eH₂‑ and the loss of laryngeals before final *‑m were dialectal Indo-European innovations. Nasal vowels in final syllables lost their nasality in East Baltic.

The loss of *‑u‑ before *‑m in Vedic gām and Greek βŏv, the rise of the long vowel in these forms, the loss of the laryngeal in Latvian gūovs, the generalization of the full grade *‑eH₂‑ in the paradigm, the loss of laryngeals before *‑m, and the loss of nasality in East Baltic final syllables are all chronologically distinct developments, none of which can appropriately be called Stang’s law. It is therefore preferable to use this term only in reference to the retraction of the stress from non-acute long vowels in Slavic, which is the basis of modern Slavic accentology.

Keywords: Balto-Slavic; Indo-European; historical phonology; Stang’s law.
was a Proto-Slavic development that affected accent paradigm (c) whereas the retraction from medial jers belonged to the separate languages and was independent of the accent paradigms (cf. Kortlandt 2014a, 129). All of these retractions are sometimes called Ivšić’s law (cf. Holzer 2007, 72f.), which sometimes includes even later retractions (cf. Kapović 2015, who distinguishes between “Ivšić’s law” for Stang’s law, “Ivšić’s rule” for the retraction from final jers, and “Ivšić’s retraction” for what I have called Ivšić’s law, cf. Kortlandt 2011, 272). While Ivšić recognized accent retractions as a source of the neo-acute (1911), he did not understand the extent of his findings. It is Stang’s great merit that he has identified the relation between retractions of the stress and the accent paradigms where they operated. The rejection of Stang’s law by the Moscow Accentological School (cf. Hendriks 2003) is based on a misunderstanding of its conditions (cf. Kortlandt 2011, 111–115, also 2015 and 2016b).

On the other hand, Stang’s law refers to the development of acc.sg. Vedic *di-um ‘sky’, *g-oum ‘bull, cow’, Greek Ζήν(α), βόν, Latin diem, Umbrian *bum from *dieu, *gouns, also acc.pl. Vedic gás, Greek βός, Umbrian *buf from *gouns (cf. Stang 1970, 40–44; Collinge 1995, 37f.; Pronk 2016). Stang derived the long vowel from the diphthong before the tautosyllabic nasal consonant. Alternatively, the long vowel can be attributed to monosyllabic lengthening followed by the loss of *‑u‑ before the tautosyllabic nasal (cf. Kortlandt 2014c, 219f.; Pronk 2016, 28–31). The problem with this hypothesis is that the accentual difference between Greek Zeúς on the one hand and βούς ‘bull, cow’ on the other suggests that the latter represent disyllabic *naHus < *neH2us and *gweH3us. Indeed, this reconstruction is confirmed by Vedic disyllabic náus < *neH2u‑s (cf. Lubotsky 1995, 229). It follows that Vedic monosyllabic gáus < *gweH3us cannot be the phonetic reflex of the PIE form.

The PIE words for ‘ship’ and ‘bovine animal’ belonged to different accent paradigms (cf. Kortlandt 1985, 118):

<table>
<thead>
<tr>
<th></th>
<th>Vedic</th>
<th>Greek</th>
<th>PIE</th>
<th>Vedic</th>
<th>Greek</th>
<th>PIE</th>
</tr>
</thead>
<tbody>
<tr>
<td>nom.sg.</td>
<td>náus</td>
<td>ναῦς</td>
<td>*neH₂us</td>
<td>gáus</td>
<td>βοῦς</td>
<td>*gweH₃us</td>
</tr>
<tr>
<td>acc.sg.</td>
<td>návam</td>
<td>νᾶν</td>
<td>*nHₑu</td>
<td>m</td>
<td>gám</td>
<td>βόν</td>
</tr>
<tr>
<td>gen.sg.</td>
<td>návás</td>
<td>νάος</td>
<td>*nHₑu</td>
<td>m</td>
<td>gós</td>
<td>βοός</td>
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The questionable form νᾶν (Herodian I 328) beside analogical ναῦν “peut être ancien” (Chantraine 1967, 97). The difference between the two
accent paradigms suggests the possibility that the word for ‘bovine animal’ was an original neuter that adopted the endings *-s and *-m at an early stage of Proto-Indo-European. It thus appears that Vedic monosyllabic gáus cannot reflect PIE *gʷeH₃us phonetically and that the accusative gám (Gāthic monosyllabic gqm) from PIE *gʷeH₃um cannot have resulted from the loss of *-u- after a long vowel from monosyllabic lengthening. Pronk reconstructs an analogical acc.sg. form *gʷH₃eum for which there is no evidence, “probably [...] in analogy to *dieum” (2016, 30). This is improbable because nom.sg. *dieus was created on the analogy of acc.sg. *dieum at an early stage of Proto-Indo-European (cf. ibidem) while nom.sg. *gʷeH₃us was preserved in Greek βοῦς. I have therefore proposed that *-u- was lost before word-final *-m at a stage before the monosyllabic lengthening, yielding *diēm < *diem < *dieum, *nH₂ēm < *nH₂em < *nH₂eum, *gʷeH₂m < *gʷeH₃m < *gʷeH₃um (cf. Kortlandt 2014c, 220f.). 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, where the long vowel never originated. Vedic generalized the oblique stem nāv- < *neH₂u- with analogical full grade and introduced lengthened grade in the nominative gáus for disambiguation from gen.sg. gós. The acc.pl. form gás was created on the analogy of acc.sg. gám. Latvian gūovs reflects the acc.sg. form *gʷeH₃m, with loss of the laryngeal after the long vowel, like sāls < *seH₃l, which is an original neuter l-stem.

The loss of *-u- before word-final *-m has important consequences for the aorist of the verb ‘to be’, the root of which I reconstruct as *bʰeH₃u-, not *bʰeH₃u-, on the evidence of Middle Welsh bu ‘was’ and Armenian busanim ‘I grow’ (cf. Kortlandt 2007, 125). The laryngeal preceded the semivowel in view of the broken tone in Latvian būt, final stress in Russian bylá (where Hirt’s law did not operate), the acute in Serbo-Croatian bāviti < *bʰoHu-, Old English bōgian, and the short vowel in Old Irish buith (= Lith. būtis), ro-both, and Latin fūtūrus (cf. Kortlandt 2007, 43). After the loss of *-u- before *-m we have a paradigm 1st sg. *bʰeH₃m, 2nd sg. *bʰeH₃us, 3rd sg. *bʰeH₃ut, pl. *bʰH₃u-, with metathesis *bʰuH₃- before a consonant. This paradigm is reflected in the Old Irish preterit 1st sg. -bá < *b OMX, -roba, -bsa, 3rd sg. -boí < *bou-e, -robae, -bo < *bou ‘was’ (cf. Thurneysen 1946, 483; Kortlandt 2007, 125f.). The Central Indo-European languages (i.e. Classic Indo-European without Italo-Celtic) generalized the zero grade variant of the root, e.g. 3rd sg. Vedic ābhūt, Greek ἦφυ < *bʰuHt < *bʰH₃ut. The vocalization
of the ending in the Vedic 1st sg. form ábhuvam suggests earlier *bh.euH₃m replacing monosyllabic *bh.euH₃m.

The distinction between proterodynamic and hysterodynamic nouns has been preserved in Vedic devi < *iH₂2, acc. devím < *-iH₃m, gen. devyás < *-ieH₂s ‘goddess’ versus vṛkh₃ < *-iH₃s, acc. vṛkyām < vṛktám < *-iH₂m, gen. vṛkyās < vṛkías < *-iH₂es ‘she-wolf’, also Latin militia ‘military service’ versus māteriēs ‘material’, Russian boginjä ‘goddess’ versus mólnija ‘lightning’, Lithuanian pati ‘wife’ versus vilkē ‘she-wolf’, Prussian sansy ‘goose’ versus mealde ‘lightning’ (cf. Kortlandt 1997). I have argued that the acc.sg. form of the hysterodynamic paradigm ended in *-eiHm, which is reflected in Latin māteriēm < *māteriēm < *-eiem (as distinct from velim ‘I will’ < *uelīm < *ueliH₁m) and Prussian warein ‘power’ (Latvian vara, vare), also Slavic svekrovo < *-euHm (cf. Rozwadowski 1914, 14–18), similar to the Vedic 1st sg. thematic optative ending -eyam < *-oiH₁m. Pronk thinks that PIE *-VHm regularly yielded vocalization of the final nasal in Indo-Iranian and that the Vedic monosyllabic acc.sg. endings -ām and -īm are analogical (2016, 23). The problem with this view, as Pronk points out himself, is that the nom. sg. endings -ā and -i are never shortened before a pause and cannot therefore directly reflect *-aH and *-iH (cf. Kuiper 1997, 319). It follows that the long vowels must have been taken from the acc.sg. endings -ām < *-aHm and -īm < *-iHm after the loss of the laryngeal with compensatory lengthening before the final nasal. I conclude that Pronk’s examples of disyllabic *-VHm partly represent earlier diphthongs before *-Hm and partly analogical *-Ham after a full grade vowel, e.g. in Vedic disyllabic gnām < gnäm ‘woman’ < *gwneH₂-, trisyllabic yāyām < yāyām ‘I may go’ < *ieH₂-iH₁-, Gothic mazdaqm < mazdaqm ‘wise’ < *mns-dʰ_eH₁₁-. The loss of *-H- before final *-m may have been an innovation of the Central Indo-European languages, as is clear from Lithuanian non-acute -q, Greek -áv, Gothic -a, all from *-ām < *-aHm < *-eH₃m, distinct from the 1st sg. thematic optative ending Vedic -eyam, Greek -oia, Gothic -au < *-oiH₁m, where *-m became syllabic. The restoration of the laryngeal in Indo-Iranian *gnaHam, *-iaHam, *-dʰaHam was more recent than the contraction in gen.sg. *-ās, dat.sg. *-āi, nom.pl. *-ās and the Indo-Iranian vocalization of the syllabic nasals that gave rise to new intervocalic laryngeals, e.g. in Vedic mās ‘moon’ < *maHas < *meh₁ns and vātä ‘wind’ < *vaHatas < *ueH₂ntos.

The Latin paradigm of the H₂-stems has a short vowel in nom.sg. -a and acc.sg. -am and an ambiguous diphthong -ae in the gen.sg. and dat.
sg. endings. The Old Irish nom.sg. and dat.sg. forms are ambiguous while the acc.sg. ending *-em must be derived from short *-am and the gen.sg. ending -e points to *-ias. There is no evidence for long *ā either in Latin or in Old Irish and the short vowel of the acc.sg. ending in the latter language is unambiguous (cf. Kortlandt 2014b, 9f.). The alleged shortening of long vowels before a final nasal consonant is based exclusively on the evidence of Indo-Iranian and Greek and must be rejected in favor of the view that -a and -am represent zero grade endings *-H₂ and *-H₂m with vocalization of the laryngeal. The Old Irish gen.sg. ending -e suggests that the original Italo-Celtic ending was *-ī, as it was in the o-stems, and that it was replaced by *-aī in Latin and adopted an additional gen.sg. ending *-os in the ancestor of Old Irish. It follows that the paradigm with a long vowel was an innovation of the Central Indo-European languages. It now appears that the full grade suffix *-eH₂ was generalized on the basis of the proterodynamic paradigm and subsequently adopted the hysterodynamic endings gen.sg. *-es or *-os, dat. sg. *-ei, loc.sg. *-i, yielding a circumflex tone in Greek. The original gen.sg. ending *-ī < *-iH was preserved in the Armenian H₂-stems (cf. Kortlandt 2003, 47) and the generalization of *-eH₂ in the genitive plural did not reach Armenian and Balto-Slavic and was recent in Germanic and Indo-Iranian (cf. Kortlandt 2014b).

The derivation of the Lithuanian acc.sg. ending -ą from *-ām < *-eH₂m shows that the inst.sg. ending -q with an acute cannot have the same origin. Since it is difficult to see how the acute can be secondary, we have to start from the original ending *-H₂eH₁ or *-eH₂H₁, both of which would yield the same result *-aH as nom.sg. *-eH₂. The obvious way to disambiguate this ending is to add the new instrumental ending *-mi for PIE *bʰi, yielding an ending *-aH-mi, as in the Slavic pronoun témb < *toi-mi. Here *toi is the original loc.sg. form that adopted the function of the instrumental in Indo-Iranian and Balto-Slavic, as in Vedic masc. té-na, fem. táy-ā, Slavic masc. tě-mb, fem. toj-ǫ (cf. Kortlandt 2016a, 93). The new Balto-Slavic form *toi-aH-mi was apparently subject to an early apocope, yielding *tojaHm (with new *-aHm), Lith. *tājǫ with an acute -q, Slavic tojǫ. The Lith. acute ending -q was then adopted in the nominal paradigm. The accentuation of inst.sg. gála (3) still preserves the original root stress of the proterodynamic paradigm (cf. Beekes 1985, 129) while the definite adjective has adopted the accentuation of the pronoun. The identification of Slavic tojǫ with Vedic loc.sg. tásyām (cf. Kortlandt 2005, 154) must be abandoned.
Thus, we arrive at a reconstruction of Proto-Balto-Slavic nom.sg. *-aH < *-eH₂, acc.sg. *-ām < *-eH₂m, nom.pl. *-ās < *-eH₂es, acc.pl. *-aHns < *-eH₂ns, all with Central Indo-European generalization of *-eH₂ replacing the earlier zero grade *-H₂. The apparent acc.pl. ending *-Hns now spread from the aH-, iH- and uH-stems to the o-, i- and u-stems (cf. Kortlandt 2016a, 92). After the rise of the broken tone and nasal vowels in East Baltic (cf. Kortlandt 1977, 324) and after the univerbation of the definite adjective, nasal vowels in final syllables lost their nasality in East Baltic, giving the impression that the acc.pl. ending reflects *-Hs (cf. Derksen 1997, 24f. and 1998, 134). In fact, there is no evidence for a PIE acc.pl. ending *-ās < *-eH₂s (cf. Stang 1966, 200; Pronk 2016, 26). It is clear that the loss of *-u- before *-m in Vedic gām and Greek βῶν, the rise of the long vowel in these forms, the loss of the laryngeal in Latvian gūoas, the rise of disyllabic endings, the generalization of the full grade *-eH₂ in the paradigm, the loss of laryngeals with compensatory lengthening before *-m, the loss and restoration of intervocalic laryngeals, the rise of the Balto-Slavic acute, and the loss of nasality in East Baltic final syllables are all chronologically distinct developments, none of which can appropriately be called Stang’s law. It is therefore preferable to use this term only in reference to the retraction of the stress from non-acute long vowels in Slavic, which is the basis of modern Slavic accentology.

**KAS YRA STANGO DĖSNIS?**

*Santrauka*


Aš esu teigęs, kad *-u- iškritęs prieš žodžio galo *-m dar iki monosilabinio pailgėjimo, tai *diem < *diem < *dieum ir *gʷeH₂m < *gʷeH₂m < *gʷeH₂um. La. gūoas atspindi acc. sg. formą *gʷeH₂m su iškritusiu laringalu po ilgojo balso. Paradigma su pamatino laipsnio priesaga *-eH₂ ir laringalu iškritimas prieš žodžio galo *-m buvo indoeuropiečių tarminės inovacijos. Nosiniai balsiai galiniuose skienyse neteko nosinumo rytų baltų kalbose.
*-u- iškritimas prieš *-m vedų gām ir gr. βῦν, ilgojo balsio atsidarinimas šiose formose, laringalo iškritimas la. γὐος, pamatinio laipsnio *-eH– apibendrinimas paradigmoje, la-ringalų iškritimas prieš *-m ir nosinumo netekimas rytų Baltų galiniuose skiemenyse yra chronologiškai skirtingi pakitimai, kurių nė vienas negali būti pavadinėti Stango dėsniu. Todėl geriau šį terminą vartoti tik kalbant apie kirčio atitraukimą iš neakūtinių ilgųjų balsių slavų kalbose, sudarantį šiuolaikinės slavų akcentologijos pagrindą.

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