

HOLGER PEDERSEN'S *ÉTUDES LITUANIENNES* REVISITED

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Holger Pedersen's *Études lituaniennes* reflects the issues under discussion at the time of its publication (1933). Its five unequal chapters deal with the following topics:

- I. The Lithuanian future and its Indo-European origins: the sigmatic formation, the 3rd person zero ending, the short root vowels *e* and *a*, the shortening and metatony in the 3rd person, and the future participle.
- II. The accentuation of nouns in Lithuanian: accentual mobility in the Indo-European consonant stems and its absence in the *o*-stems, the origins of accentual mobility in Lithuanian nominal paradigms, the accentuation of separate case forms, and accentual peculiarities of the adjective.
- III. The acute tone of the root in consonant stems.
- IV. The past active participle.
- V. Secondary vocalic alternations: new vowel length and new acute tone.

One may wonder if Holger Pedersen's thoughts about these issues have stood the test of time. It may therefore be useful to review his studies profiting from seven decades of hindsight. As many important studies have appeared in the intervening period, the answer to this question is far from obvious and requires elucidation. The aim of the present contribution is to establish what we know now and did not know seventy years ago about the origins of Lithuanian nominal and verbal morphology. In order to facilitate comparison with the original publication, I shall maintain the numbering of its sections in the following.

1. Pedersen reconstructs an Indo-European future tense with a stem in **-s-* which is best preserved in Italic and Baltic (cf. already 1921). The stem was thematicized in Greek *-se-*, *-so-* and in Indo-Iranian, Sanskrit *-sya-*. The *s*-future and the *s*-aorist represent the present and the preterit of an earlier perfective verb stem in **-s-*. F.B.J. Kuiper has subsequently (1934) identified this formation with a category of Indo-European *s*-presents, e.g. **trésti* 'flees', preterit **étērst*, subjunctive **tērse-*. I have argued that we have to start from a present 3sg. **tersti*, 3pl. **trsentī*, and a subjunctive 3sg. **tērst*, 3pl. **tersnt* (1985: 117, 2004a: 9). The co-existence of these two paradigms accounts for the multifarious sigmatic formations

attested in Celtic (cf. Kortlandt 1984), Balto-Slavic, Tocharian (cf. Kortlandt 1994), and other Indo-European languages.

2. The Lithuanian future represents an athematic sigmatic paradigm, e.g. *eĩs* ‘will go’ < **eist*. I have argued (1982: 7f.) that this paradigm actually represents a Proto-Baltic subjunctive which became a future indicative in East Baltic and an imperative in Prussian, e.g. *teĩks* ‘stelle!’. The latter language created a future indicative by the addition of present endings to the subjunctive stem, as is clear from *postāsei* ‘you will become’.

3. There is no trace of a vowel after the *-s* in the 3rd person of the Lith. future, e.g. *eĩs* ‘will go’. The vowel of *-si-* in the other persons developed phonetically before the nasal resonant in 1sg. **eism* and 3pl. **eisnt* (cf. Kortlandt 1982: 7, Endzelin 1948: 204).

4. Thus, the Lith. future represents an athematic paradigm with secondary endings. Unlike Pedersen, I conclude that it developed from a Proto-Baltic subjunctive which can be identified with the Indo-Iranian sigmatic aorist injunctive. The same formation underlies subjunctive and future paradigms in Celtic.

5. The short root vowels *e* and *a* in the Lith. future, e.g. *kèps* ‘will bake’, *tàps* ‘will become’, also show that there was no following syllable because these vowels are phonetically lengthened in non-final syllables. In my view (1982: 6f.), the absence of final stress in 1sg. *kèpsiu* and 2sg. *kèpsi* is a result of the fact that the paradigm had non-acute athematic endings at the time when Saussure’s law operated.

6. In the 3rd person of the Lith. future, acute *y* and *ū* are usually shortened in monosyllables whereas acute *é*, *o* and diphthongs are subject to metatony, e.g. *līs* ‘will rain’, *būs* ‘will be’, *duōs* ‘will give’, *dir̃bs* ‘will work’. Pedersen thinks that the metatony in *jōs* ‘will ride’, *duōs* ‘will give’, *dēs* ‘will put’, *liēs* ‘will pour’ and polysyllables in *-ōs*, *-uōs*, *-ēs*, *-ỹs* is analogical and that these forms replace earlier **-às*, **-ūs*, **-ès*, **-ìs* (similarly Petit 2002). The problem with this view is that there is no motivation for the massive analogical spread of metatony from a limited basis to the large majority of verbs, especially because nothing comparable happened in nominal paradigms. As I have argued elsewhere (e.g. 1985: 115, 2002a: 16), we rather have to assume early loss of the acute in monosyllables with Proto-Indo-European long vowels, e.g. **jās*, **dōs*, **d̃ēs*, **lēis*, yielding a circumflex which then spread to polysyllabic verbs. The same development accounts for the circumflex in Latvian *sāls* ‘salt’, *gūovs* ‘cow’, and Lith. *-dē* in *arklidē* ‘stable’, *avidē* ‘sheepfold’, *alūdē* ‘pub’, *pelūdē* ‘chaff store’.

7. The Slavic remnant of the future participle *byšęšteje* ‘future’ supports the athematic character of the sigmatic future.

8. All these indications point to an athematic future paradigm which may be compared with the Italic *s*-future.

9. Pedersen starts from an *s*-future with zero grade root and full grade suffix **-es-* before **-mi*, **-si*, **-ti* and an *s*-aorist with lengthened grade root and zero grade suffix **-s-* before **-m*, **-s*, **-t*. Since Lithuanian has no trace of the full grade suffix, I prefer the derivation from a subjunctive (Indo-Iranian sigmatic aorist injunctive) in the case of full grade roots, maintaining the derivation from an *s*-present in the case of zero grade roots such as *būs* ‘will be’, which can now be identified with the Old Irish subjunctive *-bé* < **b(w)es(t)* (cf. Kortlandt 1984: 185), cf. Oscan and Umbrian *fust* ‘will be’.

10. For the Indo-European nominal paradigms, Pedersen reconstructs fixed stress for stems in a vowel and mobile stress for stems in a consonant. Apophonic alternations suggest two earlier types of accentual mobility, a “proterodynamic” type with an alternation between radical and suffixal stress and a “hysterodynamic” type with an alternation between radical or suffixal and desinential stress. There is no trace of accentual mobility in the *o*-stems, where the nominative and the genitive may have been identical from the outset (as they are in Hittite) and other case forms appear to have adopted pronominal endings. Pedersen’s theory on the origins of the nominal inflection has been elaborated in detail by R.S.P. Beekes (1985).

11. There is no trace of the original accentual mobility outside the consonant stems in Lithuanian, which developed new types of accentual mobility in all flexion classes. Elsewhere I have argued that important traces of the original system have been preserved in Old Prussian (1997).

12. F. de Saussure has seen (1896: 163) that in polysyllabic consonant stems with mobile stress, the accent was retracted from all non-final syllables to the beginning of the word form in Lithuanian, e.g. *duktė* ‘daughter’, acc.sg. *dūkterį*, gen.sg. (Daukša) *dukterės*, nom.pl. (Daukša) *dūkteres*, gen.pl. *dukterių*, cf. Greek *thugatēr*, *-téra*, *-trós*, *-téres*, *-trōn*. Unlike Saussure, Pedersen insists on calling this development a phonetic law.

13. As Saussure recognized (1896: 164), the accentual mobility in nominal paradigms with vocalic stems is based on the analogy of paradigms with consonantal stems, e.g. *ugnīs* ‘fire’, *sūnūs* ‘son’, *žvaigždė* ‘star’, *mergà* ‘girl’, acc.sg. *ūgni*, *sūnu*, *žvaigždę*, *mergą*. This mobility cannot represent the original proterodynamic paradigm because the accent was not retracted in the nom.sg. form and because the retraction affected the *o*-stems, which never had mobile stress. Pedersen attributes the circumflex ending of acc.sg. *mergą*, where Saussure’s law did not operate, to the analogy of the *i*-, *u*- and *o*-stems. I rather assume phonetic loss of the original laryngeal before word-final **-m* in early Balto-Slavic, especially because the acute

was generalized in the acc.pl. forms before the ending **-ns*. The loss of the laryngeal in **-aHm* may also have affected Indo-Iranian in view of nom.sg. *-ā* versus acc.sg. *-ām*, not ***ā*, as opposed to nom.acc.pl. *-ās*, and be compared with the loss of **u* before **-m* in acc.sg. **diēum*, Skt. *dyām* ‘sky’.

14. Thus, the accentual mobility in Lith. nominal paradigms is wholly based on that of the Indo-European hysterodynamic consonant stems. The accentuation of the separate case forms must be examined in detail.

15. The retraction of the stress in the Lith. acc.pl. forms agrees with Greek *pódas* ‘feet’, not with Sanskrit *padás*, which must be an innovation.

16. The retraction in the Lith. dat.sg. forms corresponds to the medial stress of Skt. loc.sg. *pitári* ‘father’, not with the final stress of Gr. dat.sg. *patri* or Skt. dat.sg. *padé*, loc.sg. *padí* ‘foot’. The original dat.sg. ending of the consonant stems was *-i*, as is clear from the gerund with a dative subject in *vaīkui kriñtant* ‘when a child falls’ and *jám dár negimus* ‘when he had not yet been born’ (with loss of unstressed **-i* in the gerund). The retraction of the stress in the dat.sg. forms was a common Balto-Slavic development. Pedersen maintains that the final stress in the loc.sg. form of Slavic *i-* and *u-* stems is an archaism while the final stress of the Lith. loc.sg. in **-ė* represents an innovation. In my view, the East Baltic locative is an inessive which was originally created by the addition of stressed **en* to the pronominal locatives **tāmi*, **tājai*, **tāisu* and subsequently replaced the earlier locative, which is preserved in Slavic.

17. The stress was also retracted in the inst.sg. form of the *o-* and *ā-* stems, in my view perhaps because the ending was still **-oi* at that stage, as it must have been in the Sanskrit pronoun masc. *tēna*, fem. *tāyā* before the addition of *-na*, *-ā* (cf. Beekes 1995: 204). In Slavic we find the reflex of **toi* with added masc. **-mi* and fem. **-ām*, corresponding to Sanskrit loc.sg. *tāsmīn*, *tāsyām*. The instrumental may not have been strictly differentiated from the locative at an early stage. The East Baltic inst.sg. endings appear as acute **-ō* and **-ām*, where the acute was evidently taken from the original ending **-H₁* of the consonant stems. The stress was also retracted from the Balto-Slavic gen.sg. ending of the *o-* stems, circumflex **-ō*, which represents the original ablative of this flexion class. Pedersen’s assumption of an analogical retraction of the stress in the oblique case forms of the singular *o-* stems because these endings differed from those of the consonant stems seems less well-founded than my hypothesis of a phonetic retraction from final open syllables (cf. 1977: 322).

18. Pedersen adheres to the classic view that the Lith. nom.pl. ending of the *o-* stems *-ai* represents an original neuter desinence. This theory was disproved by E. Nieminen (1922, cf. already Van Wijk 1918: 99-108), who regarded *-ai* as the reflex of unstressed **-oi*. The latter view was endorsed by C.S. Stang (1966: 67)

and by the present author (1977: 323 and 1993). Pedersen derives the nom.pl. form *degā* of the participle *degās* ‘burning’ from a neuter plural form without ending, homophonous with the neuter singular form in **-ont*. In my view, this homophony arose from the early loss of the zero grade ending **-H₂* in Balto-Slavic.

19. Pedersen attributes the preservation of final stress in nom.pl. *stori*, *storieji* ‘(the) thick (ones)’ to the pronominal origin of the desinence. V.M. Illič-Svityč has shown (1963: 124) that Balto-Slavic stem-stressed neuters became masculines at an early stage while end-stressed neuters preserved distinct endings. Since the stress was regularly retracted from the masculine nom.pl. ending **-oi*, as is clear from the Slavic evidence, the stressed neuter ending **-aH* was in complementary distribution with the unstressed masculine ending **-oi* after the latter replaced the original ending of stem-stressed neuters (cf. Kortlandt 1993). Thus, I think that acute **-ie* represents the stressed neuter ending **-aH-i* while circumflex *-ai* continues original unstressed **-oi*.

20. According to Pedersen, dat.sg. *storám* and dat.pl. *storiems* ‘thick’ adopted their non-initial stress together with the endings from the pronoun, e.g. *tám* < *tāmui*, *tiems* < *tiemus*, and this accentuation subsequently spread to the nominal dat.pl. forms, e.g. *širdìms* ‘hearts’, *sūnùms* ‘sons’, and to the dual. I agree with this view and maintain that the converse development of final stress in the instrumental and locative case forms of the pronoun, e.g. *tuomì*, *tamè*, *tuosè*, *tomìs*, *tosè*, was an East Baltic innovation (2004b: 72).

21. The accent was also retracted from final *-as* in the nom.sg. form of the *o*-stems, but at a more recent stage, e.g. *gēras*, *geràsis* ‘(the) good (one)’, cf. *gaidỹs* ‘rooster’ < **-iàs*. Pedersen suggests that this development may have taken place under the influence of the vocative. I rather agree with Nieminen (1922: 155) that the stress was phonetically retracted from **-à(s)* in Lithuanian, apparently to a preceding long vowel or diphthong only (cf. Stang 1966: 171), probably at a stage before Saussure’s law operated (cf. Kortlandt 1977: 325-328).

22. Pedersen concludes that the only singular case form of the *o*-stems where original final stress was preserved is the locative, e.g. *langè* ‘window’. I disagree because the Slavic evidence clearly points to retraction of the stress from final **-oi* here. The Lith. loc.sg. form is an inessive which was created by the addition of stressed **en* to the earlier locative in East Baltic (cf. Kortlandt 2005).

23. Pedersen observes that the root syllable of polysyllabic consonant stems with mobile stress is usually acute, e.g. *piemuõ* ‘shepherd’, *dieveris* ‘brother-in-law’, *vanduõ* ‘water’, acc.sg. *piemeni*, *dieveri*, *vandeni*, and proposes metatony accompanying the rise of accentual mobility as an explanation. In fact, the acute is the reflex of an Indo-European laryngeal in the first two instances and is a result of Winter’s law in the third example (cf. Kortlandt 1988: 388).

24. The vowel *-e-* in the masc. nom.sg. ending *-es* of the past active participle, e.g. *áugeš* ‘grown’, was taken from the original loc.sg. form in **-wes*.
25. The intrusive nasal in the ending *-es* requires an explanation.
26. The correspondence between Skt. *-vat-*, Gr. *-ot-*, Gothic *-wōd-* and Old Irish *-d-* points to original **-wot-* in the same paradigm.
27. The correspondence between Lith. *mėnuo* ‘month’, acc.sg. *mėnesį*, and Gothic *mēna* ‘moon’, *mēnōþs* ‘month’ points to an original nom. sg. **mēnōt*, suggesting for the past active participle an original nom.sg. masc. **-wōt*, neuter **-wot*. In my view, we have to start from an original stem in **-t-* which was assibilated to **-s-* before the loc.sg. ending **-i* (which was lost except under the stress) at an early stage (cf. Kortlandt 2002b: 221).
28. The intrusive nasal may have been taken from the suffix **-went-*.
29. The neuter ending *-e* < **-ent* now confirms the final **-t* reconstructed on the basis of the Sanskrit, Greek, Germanic and Celtic evidence.
30. The rise of the intrusive nasal was supported by the present active participle in *-nt-*.
31. Pedersen adheres to the traditional view that Lith. *várna* ‘crow’ is a *vṛddhi* formation of *várnas* ‘raven’, similarly Russ. *voróna*, *vóron*. I have argued (1985: 121) that we have **-Hn-* beside **-w-* here, cf. Latin *cornīx* ‘crow’, *corvus* ‘raven’, like Russ. *sérna* ‘roe deer’ and Latv. *mēļns* ‘black’ beside Lith. *širvas* ‘grey’, *muļvas* ‘reddish’.
32. Balto-Slavic *i*-verbs had an athematic present with **-ei-* in the singular and **-i-* in the plural. I have argued that this alternation is actually preserved in Old Prussian (1987: 107). The Lith. optative, the oldest paradigm of which is 1sg. *-biau*, 2sg. *-bei*, 1pl. *-bime*, 2pl. *-bite*, must be derived from sg. **bjē-*, pl. **bī-* (cf. Endzelin 1948: 214, Stang 1966: 429, Kazlauskas 1968: 395). The difference between circumflex **-ei-* in the present and acute **-ī-* in the optative is still extant in Serbo-Croatian long *-ī-* in the present versus short *-i-* in the conditional *bi* (cf. Vaillant 1966: 98).
33. We also find an acute in Lith. *širdis* ‘heart’, acc.sg. *širdį*, which is an instance of Winter’s law (cf. Kortlandt 1988), and in *vilkė* ‘she-wolf’, which is not an analogical *vṛddhi* formation of *vilkas* ‘wolf’ (thus Pedersen) but an *iH₂*-stem where the metatony arose from retraction of the stress from antevocalic **i* (cf. Kortlandt 1977: 325, 1997: 159). While Pedersen’s insights into the origins of the verbal and nominal morphology of Lithuanian were fundamental steps in the development of our knowledge, his views on the rise of new vowel length and metatony have not stood the test of time.

REFERENCES

- Beekes, Robert S.P.
 1985 *The origins of the Indo-European nominal inflection* (Innsbruck: Institut für Sprachwissenschaft).
 1995 *Comparative Indo-European linguistics: An introduction* (Amsterdam: John Benjamins).
- Endzelīns, Jānis
 1948 *Baltu valodu skaņas un formas* (Rīga: Latvijas valsts izdevniecība).
- Illič-Svityč, Vladislav M.
 1963 *Imennaja akcentuacija v baltijskom i slavjanskom: Sud'ba akcentuacionnyx paradigm* (Moskva: Akademija Nauk SSSR).
- Kazlauskas, Jonas
 1968 *Lietuvių kalbos istorinė gramatika* (Vilnius: Mintis).
- Kortlandt, Frederik
 1977 Historical laws of Baltic accentuation. *Baltistica* 13/2, 319-330.
 1982 Innovations which betray archaisms. *Baltistica* 18/1, 4-9.
 1984 Old Irish subjunctives and futures and their Proto-Indo-European origins. *Ériu* 35, 179-187.
 1985 Long vowels in Balto-Slavic. *Baltistica* 21/2, 112-124.
 1987 The formation of the Old Prussian present tense. *Baltistica* 23/2, 104-111.
 1988 Remarks on Winter's law. *Studies in Slavic and General Linguistics* 11, 387-396.
 1993 Tokie šalti rytai. *Baltistica* 28/1, 45-48.
 1994 The fate of the sigmatic aorist in Tocharian. *Tocharisch: Akten der Fachtagung der Indogermanischen Gesellschaft, Berlin 1990* (Reykjavík: Málvísindastofnun Háskóla Íslands), 61-65.
 1997 Baltic *ē-* and *ī/jā-*stems. *Baltistica* 32/2, 157-163.
 2002a Shortening and metatony in the Lithuanian future. *Baltistica* 37/1, 15-16.
 2002b The Indo-Uralic verb. *Finno-Ugrians and Indo-Europeans: Linguistic and literary contacts* (Maastricht: Shaker), 217-227; also available at www.kortlandt.nl
 2004a Accent and ablaut in the Vedic verb. *Indo-Iranian Journal* 47/1, 7-15.
 2004b Final stress in Balto-Slavic mobile paradigms. *Baltu Filologija* 13/1, 71-74.
 2005 On the accentuation of the illative. *Baltu Filologija* 14, 00-00.
- Kuiper, Franciscus B.J.
 1934 Zur Geschichte der indoiranischen *s-*Präsentia. *Acta Orientalia* 12, 190-306.
- Nieminen, Eino
 1922 *Der urindogermanische Ausgang -ai des Nominativ-Akkusativ Pluralis des Neutrum im Baltischen* (Helsinki: Suomalainen Tiedeakatemia).
- Pedersen, Holger
 1921 *Les formes sigmatiques du verbe latin et le problème du futur indo-européen* (København: Høst & Søn).
 1933 *Études lituaniennes* (København: Levin & Munksgaard).
- Petit, Daniel
 2002 Abrègement et métatonie dans le futur lituanien. *Bulletin de la Société de Linguistique de Paris* 97/1, 245-282.
- Saussure, Ferdinand de
 1896 Accentuation lituanienne. *Indogermanische Forschungen: Anzeiger* 6, 157-166.

- Stang, Christian S.
1966 *Vergleichende Grammatik der baltischen Sprachen* (Oslo: Universitetsforlaget).
- Vaillant, André
1966 *Grammaire comparée des langues slaves III: Le verbe* (Paris: Klincksieck).
- Van Wijk, Nicolaas
1918 *Altpreussische Studien* (Haag: Martinus Nijhoff).