

# Language in Focus: Structure of Lithuanian

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## Prosody

### 1 Introduction: Lexical Accent Systems

- Lithuanian is a language with lexical accent. Lexical accent systems show up in different parts of the world and are quite common cross-linguistically (Alderete, 2001; Haraguchi, 1975; Halle and Vergnaud, 1987; Revithiadou, 1999; Hyman, 1977; Inkelas, 1998; Blevins, 1993).
  - ☞ **In a lexical accent language, at least some prosodic features are pre-coded in the lexical entries of all or some of its morphemes.**
  - Lexical accent languages are located on the typological axis between pure tonal languages (Yip, 2002) like Vietnamese or Thai (where virtually every syllable has unique prosodic features) and languages like Finnish or Czech where accentuation is rhythmically predictable for every prosodic word.
  - Prosodic elements have different manifestations in different languages (often combined): (a) pitch (b) intensity (c) duration (d) phonation (e) interaction with segment quality.
- (1) *Vietnamese (Mon-Khmer, Vuong and Moore 2008):*  
unique prosody in each syllable/morpheme (6 different tones)
    - a. mã ‘horse’ → rising pitch, heavy glottalization in the middle
    - b. mà ‘nevertheless’ → low pitch, breathy voice
    - c. ma ‘spirit’ → level M or H pitch, normal phonation
  - (2) *Czech (Slavic, own data): accent always on the first syllable, mostly expressed via intensity*
    - a. náměstí ‘square / plaza’
    - b. Červenková (family name)
    - c. profesorkami ‘professor.F.PL.INSTR’
    - d. drahá dráha ‘expensive trip’
  - (3) *Japanese (isolate, Haraguchi 1975):*  
rising pitch up to the accented position (lexically specified), low pitch after the peak
    - a. ínoti ‘life’ [HLL]
    - b. kokóro ‘heart’ [MHL]
    - c. atamá ‘head’ [LMH]
  - (4) *Russian (Slavic, own data): higher pitch, high intensity and length on accented nucleus; position lexically specified; unaccented nuclei phonetically weak*
    - a. ruká ‘hand.SG.NOM’ → rúku ‘hand.SG.ACC’
    - b. trubá ‘pipe.SG.NOM’ → trubú ‘pipe.SG.ACC’
    - c. múka ‘suffering.SG.NOM’ → múku ‘suffering.SG.ACC’
- Lithuanian is a system akin to those found in Russian and Japanese. That means, the position of the underlying accent in a morpheme is unpredictable (must be learned together with the segmental

string), and there are various types of accent interactions when morphemes are strung together to form derived and inflected words.

- (5) a. dainà [damá] ‘song.SG.NOM’ → daĩnà [daĩnaa] ‘song.SG.ACC’ → dainóms [damóoms] ‘song.PL.DAT’  
 b. rankà [raŋká] ‘hand.SG.NOM’ → raĩkà [raĩkaa] ‘hand.SG.ACC’ → raĩkoms [raĩkóoms] ‘hand.PL.DAT’  
 c. várna [várna] ‘crow.SG.NOM’ → várnà [várnaa] ‘crow.SG.ACC’ → várnoms [várnóoms] ‘crow.PL.DAT’

## 2 The Phonetics of Accent

### 2.1 Syllable types

- We saw in the previous class indications of the fact that Lithuanian has two quantitatively different syllable types: light and heavy.
- Light syllables (we are going to say that they have one weight unit, a mora [μ]) obligatorily contain a short vowel, possibly with an obstruent in the coda position:

- (6) a. bù.tas [bú.tas] ‘apartment.SG.NOM’  
 b. kàs.ti [kás<sup>ˀ</sup>.t<sup>ˀ</sup>i] ‘to dig’

- Heavy syllables contain (a) a long nuclear vowel (V<sub>1</sub>V<sub>1</sub>); (b) a diphthong (V<sub>1</sub>V<sub>2</sub>); (c) a short vowel and a sonorant - /r l m n/ - in the coda (VR). We are going to say that they have two moras - [μμ]:

- (7) a. tã [taá] ‘that.SG.ACC’  
 b. draũ.gas [draú.gas] ‘friend.SG.NOM’  
 c. veĩ.kia.me [v<sup>ˀ</sup>ɛĩ<sup>ˀ</sup>.k<sup>ˀ</sup>ɛ.m<sup>ˀ</sup>ɛ] ‘we cry’  
 d. vâl.go.te [vâl.gɔɔ.t<sup>ˀ</sup>ɛ] ‘you (pl) eat’

- ☞ The VR combination, i.e. short vowel + sonorant, is called a ‘mixed diphthong (*mišrùsis dvigarsis*)’ in traditional Lithuanian linguistic terminology.

### 2.2 Accent marks

- In a light accented syllable, the only available mora has the accent. In Lithuanian orthography, it is marked with the grave accent:

- (8) a. bitè: bì.tè [b<sup>ˀ</sup>í.t<sup>ˀ</sup>ɛɛ] ‘bee.SG.NOM’  
 b. bite: bi.tè [b<sup>ˀ</sup>i.t<sup>ˀ</sup>ɛ] ‘bee.SG.INSTR’  
 c. kasa: ka.sà [ka.sá] ‘braid.SG.NOM (hair)’  
 d. bus: bùs [bús] ‘(s)he will be’  
 e. butu: bu.tù [bú.tú] ‘apartment.SG.INSTR’  
 f. bala: ba.là [ba.lá] ‘puddle.SG.NOM’

- The grave accent is also used to indicate that the left-hand mora is accented in a heavy syllable in the following combinations: iR, uR, ui:

- (9) a. kulti: kùl.ti [kùl̩.t̩] ‘to thrash’  
 b. uiti: ùi.ti [ùi.t̩] ‘to chase’  
 c. pilti: pil̩.ti [p̩l̩.t̩] ‘to pour’

- In all other types of heavy syllables with the left-hand mora accented, the acute accent is used, including the atomic gliding vowels [iɛ] and [uɔ]:

- (10) a. ietis: ié.tis [ié.t̩is] ‘lance/spear/javelin.SG.NOM’  
 b. uodas: úo.das [úɔ.das] ‘mosquito.SG.NOM’  
 c. ažuolas: á.žuolas [áa.ʒuɔ.las] ‘oak.SG.NOM’  
 d. pavalgė: pa.vál.gė [pa.vál̩.g̩ee] ‘(s)he ate’  
 e. laimė: lái.mė [lái.m̩ee] ‘happiness.SG.NOM’  
 f. nusprendžia: nu.sprén.džia [nɔ.s̩p̩r̩ɛn̩.d̩ʒ̩ɛ] ‘(s)he decides’

- ☞ Finally, for all heavy syllables which bear the accent on the right-hand mora, the accent is always indicated using a tilde (placed over the second component, if possible):

- (11) a. meta: mē.ta [m̩ɛ́.ta] ‘(s)he throws’<sup>1</sup>  
 b. kaltas: kaĩ.tas [kaĩ̯.tas] ‘guilty.M.SG.NOM’  
 c. varpas: vaĩ.pas [vaĩ̯.pas] ‘bell.SG.NOM’  
 d. miškan: miš.kaĩ̯ [m̩ʃ̩.kaĩ̯] ‘forest.SG.ILL’  
 e. šuo: šuõ [ʃ̩uõ] ‘dog.SG.NOM’  
 f. laivas: laĩ.vas [laĩ̯.vas] ‘ship.SG.NOM’

- ⊙ The grave accent on ùi, ùR and ìR (instead of accent aigu) has phonetic reasoning behind it (the first component here is supposed to be less intensely lengthened than /a/ or /ɛ/ because it is a [-ATR] high vowel where shortness/abruptness is allegedly an important phonetic feature, cf. [Ambrazas 2006](#)), but for our purposes, it’s just an orthographic annoyance that we have to live with.

- (12) *Left-hand / falling accent:*

- a. ùR, ìR, ùi [looks like a light syllable, but it’s not!]  
 b. áR, éR, íe, úo, ái, áu, éi

- (13) *Right-hand / rising accent:*

- uĩ̯, iĩ̯, aĩ̯, eĩ̯, uĩ̯, iẽ̯, uõ̯, aĩ̯, aũ̯, eĩ̯

## 2.3 The two contours on heavy syllables

- We have seen that heavy syllables may be accented on the left-hand (lt. *tvirtaprādė priėgaidė*) or the right-hand mora (lt. *tvirtagālė priėgaidė*) ([Stundžia, 2009](#)).

1. In case a long vowel is involved, three factors play a role: (a) length (b) pitch (c) intensity.

- A left-stressed long vowel has a lot more intensity closer to its onset, with both pitch and intensity decreasing towards the end:

- (14) a. v́yras [v̩́iiras] – iĩ̯iĩ̯ – ‘man.SG.NOM’  
 b. ŕúgsta [r̩úuksta] – uũũũũ – ‘it becomes sour’

<sup>1</sup> Whenever the underlyingly short /a ɛ/ are lengthened, the accent always goes to the right side of the resulting long vowel.

- A right-stressed long vowel has steady or slightly rising intensity and is usually longer than the previous accent type:

- (15) a. l̃yja [l̃ij̃j̃ɛ] – iiiii– ‘it rains’  
 b. r̃ūksta [rũksta] – uuuuu– ‘it gets foggy’

2. In a diphthong, the left-hand accent results in a more announced first component, while the second component is less prominent and slightly reduced. The opposite holds for the right-hand accent.

- (16) a. láukti [láu̯kʲt̃j̃] [[láu̯wkʲt̃j̃] ] ‘to wait’  
 b. véidas [ṽéidas] [[ṽéj̃das]] ‘face.SG.NOM’  
 c. tái [tái] [[táj̃]] ‘that.F.SG.DAT’

- (17) a. laũkas [lau̯kas] [[láu̯kas]] ‘field.SG.NOM’  
 b. veĩks [ṽéiks] [[ṽéj̃ks]] ‘it will function’  
 c. taĩ [taĩ] [[táj̃]] ‘that.N.SG.NOM’

3. In a ‘mixed’ diphthong (VR), the accented component has more length and intensity, and the unaccented one, in case it’s the vowel, is somewhat reduced:

- (18) a. pùlti [pú̯lt̃j̃] [[pú̯lt̃j̃]] ‘to attack’  
 b. kánda [kánda] [[káj̃nda]] ‘(s)he bites’  
 c. várnas [várnas] [[váj̃rnas]] ‘crow.PL.ACC’

- (19) a. gũlti [gu̯lt̃j̃] [[gu̯lt̃j̃]] ‘to lay down’  
 b. rańda [rańda] [[ráj̃nda]] ‘(s)he finds’  
 c. vařdas [vařdas] [[váj̃rdas]] ‘name.SG.NOM’

- The difference between the two accent types is contrastive in some cases:

- (20) a. káltas ‘gouge.SG.NOM’ ↔ kaĩtas ‘guilty.M.SG.NOM’  
 b. láuk! ‘wait.IMP’ ↔ laũk! ‘get out!’  
 c. ìndas ‘Indian.SG.NOM’ ↔ ińdas ‘dish.SG.NOM’  
 d. kóšė ‘(s)he filtered’ ↔ kōšė ‘porridge.SG.NOM’  
 e. šáu̯k! ‘shoot.IMP’ ↔ šaũ̯k! ‘call.IMP’  
 f. tám ‘that.M.SG.DAT’ ↔ taĩ ‘that.M.SG.LOC’  
 g. várnas ‘crow.PL.ACC’ ↔ vařnas ‘raven.SG.NOM’  
 h. vārpa ‘ear.SG.ACC (of plant)’ ↔ vařpa ‘bell.SG.ACC’  
 i. išvĩrsi ‘you will boil’ ↔ išvĩrsi ‘you will fall (out)’  
 j. pavėrgti ‘to enslave’ ↔ paveřkti ‘to cry’

! When reading accented Lithuanian examples (throughout the rest of this course), it is enough to remember that the tilde stands for the right-hand accent, and everything else is either left-hand or a short syllable, for which no contrast exists per definition.

- For more information on the pronunciation of the two contours, see [Ambrazas \(2006\)](#); [Bakšienė \(2013\)](#); [Stundžia \(2009\)](#); [Girdenis \(2003\)](#); [Dambriūnas et al. \(1998\)](#); [Pakerys \(1995\)](#). Note that not all authors agree with each other!

### 3 Nominal Accentuation

- A non-compound prosodic word in Lithuanian always has one surface accent.

- (21) a. nesikeičiù [nʲɛsʲikʲɛitʲjʊ́] ‘I don’t change’  
 b. nesikeičia [nʲɛsʲikʲɛítʲjɛ́] ‘(s)he doesn’t change’  
 c. nesikeičiau [nʲɛsʲikʲɛitʲjʌu] ‘I didn’t change’  
 d. pėrsodinėjo [pʲɛrsɔdʲimʲɛejɔ] ‘(s)he was replanting/re-seating’

- Nominal roots always have an underlying accent. This accent may be strong or weak (Kushnir, 2019). In some situations, there is no visible difference on the surface:

- (22) a. daĩn- /daĩn-/ + -ą /-aa/ → daĩną [daĩnaa] ‘song.SG.ACC’  
 b. raĩnk- /raĩnk-/ + -ą /-aa/ → raĩną [raĩkaa] ‘hand.SG.ACC’<sup>2</sup>

- In the two examples above, the affix has no underlying accent, so the surface accent simply coincides with the accent of the root.

☞ The configuration is not as simple if the affix has its own inherent prosodic features.

- If the stem and the affix have two accents of the same intensity, or if the stem’s accent is stronger, the stem will take precedence over the affix:

- (23) a. raĩnk+ /raĩnk-/ + -ũ /-uũ/ → raĩnkũ [raĩkũu] ‘hand.PL.GEN’  
 b. gálv /gálv-/ + -à /-á/ → gálva [gálva] ‘head.SG.INSTR’

- (24) vȳr- /vȳir-/ + -ù /-ú/ → vȳru [vȳiirʊ] ‘man.SG.INSTR’

- An affix will therefore surface with its underlying accent if the stem’s accent is weaker:

- (25) daĩn- /daĩn-/ + -ũ /-uũ/ → dainũ [daiuũ] ‘song.PL.GEN’

☞ An affix will also surface with its accent intact in case the two underlying accents are adjacent at the right edge of the word. In this instance, the relative strength of the two accents plays no role!

- (26) a. daĩn- /daĩn-/ + -à /-á/ → dainà [daiená] ‘song.SG.INSTR’  
 b. raĩnk- /raĩnk-/ + -à /-á/ → rankà [raĩká] ‘hand.SG.INSTR’ [cf. (24)]

- (27) a. mišk- /míʃk-/ + -è /-é/ → miškè [mʲiʃkʲɛ́] ‘forest.SG.LOC’  
 b. ràt- /rát-/ + -è /-é/ → ratè [raté] ‘wheel.SG.LOC’

- This latter process is known as the Saussurian Shift.
- Two strong affixes do not undergo the shift: -ùs /-ũs/ SG.NOM (4); -is /-ĩs/ SG.NOM (3):

- (28) tuĩrg- /tuĩrg-/ + -ùs /-ũs/ → [tuĩrgʊs] ‘market.SG.NOM’ [cf. (27-b)]

- (29) sũn- /sũun-/ + -ùs /-ũs/ → sũnùs [suunʊs] ‘son.SG.NOM’

<sup>2</sup> A strong accent is indicated here using a double acute.

- In colloquial Lithuanian, a lot of personal names and loanwords with strong stems resist the Saussurian shift:

- (30) a. Āst- /āst-/ + -à /-ā/ → Āsta [aásta]<sup>3</sup> ‘Asta.SG.NOM’ [prescr. Astà]  
 b. limuzìn- /limʊzín-/ + -ù /-ú/ → limuzìnu [lʲimʊzʲínʊ] ‘limousine.SG.INSTR’ [prescr. limuzinù]

- The Saussurian shift is also present in verbs:

- (31) a. veřk- /vɛřk-/ + -i- /-j-/ + -ù /-ú/ → verkiù [vʲɛɾʲkʲú] ‘I cry’  
 b. kánd- /kánd-/ + -ù /-ú/ → kándu [kándʊ] ‘I bite’

### 3.1 Weakening (dominance) and fortification

- Some stem-forming suffixes, traditionally called ‘dominant’ in literature (Inkelas, 1998; Halle and Vergnaud, 1987), seem to disregard the preference for stems seen in (23-a):

- (32) éln- /élnʲ-/ + -ien- /-íen-/ → elníen- /ɛlnʲien-/ ‘deer meat’

- (33) a. elníen- /ɛlnʲien-/ + -à /-á/ → elníena [ɛlnʲienə] ‘deer.meat.SG.INSTR’  
 b. elníen- /ɛlnʲien-/ + -õs /-õs/ → elníenos [ɛlnʲienõs] ‘deer.meat.SG.GEN’

- The process above cannot be attributed to the Saussurian shift since there is no adjacency, and the end-of-word condition is also not met.
- A few other suffixes do not contribute an accent of their own, but cause the original stem’s accent to become weak:

- (34) éln- /éln-/ + -en- /-en-/ → élnen- /élnen-/ ‘deer skin’

- (35) a. éln- /élnʲ-/ + -ą /-aa/ → élnia [élnʲia] ‘deer.SG.ACC’  
 b. élnen- /élnen-/ + -ą /-aa/ → élnenũ [élnʲienaa] ‘deer.skin.SG.ACC’

- (36) a. éln- /élnʲ-/ + -ũ /-uú/ → élniu [élnʲiu] ‘deer.PL.GEN’  
 b. élnen- /élnen-/ + -ũ /-uú/ → elnenũ [élnʲienuú] ‘deer.skin.PL.GEN’

- There is another process which seems to have the opposite effect: an underlyingly weak root/stem becomes strong when an affix is added:

- (37) vaĩk- /vaĩk-/ + -išk- /-ɪʃk-/ → vaĩkišk- /vaĩkɪʃk-/ ‘childish’

- (38) a. vaĩk- /vaĩk-/ + -as /-as/ → vaĩkas [vaĩkas] ‘child.SG.NOM’  
 b. vaĩk- /vaĩk-/ + -aĩs /-aĩs/ → vaikaĩs [vaikaĩs] ‘child.PL.INSTR’

- (39) a. vaĩkišk- /vaĩkɪʃk-/ + -as /-as/ → vaĩkiškas [vaĩkʲɪʃkas] ‘childish.M.SG.NOM’  
 b. vaĩkišk- /vaĩkɪʃk-/ + -aĩs /-aĩs/ → vaĩkiškais [vaĩkʲɪʃkais] ‘childish.M.PL.INSTR’

- Both weakening (dominant) and fortifying affixes play a big role in the system of verbal participles.

<sup>3</sup> With lengthening of /a/ to [aa].

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