# Structure of Lithuanian

### Class 02: Lithuanian Accentuation

# 1 The Syllable

### 1.1 The Structure of the Syllable

The following key aspects of syllabification are important for understanding the system of Lithuanian accentuation:

- The syllable template: (((C)C)C)V(V)(R)(C(C)) (Ambrazas 2006);
- Maximum syllable: springs [s<sup>j</sup>p<sup>j</sup>r<sup>j</sup>ŋks] 'he will choke';
- Not all combinations are possible. For example, if there is coda sonorant, the vowel cannot be long or a diphthong (see below): \*VVR. Certain clusters do not occur in Lithuanian, for example, onsets like /ld-/, /ng-/, /sx-/, /lx-/ and many others;
- There are syllables that begin with the nuclear vowel (without an epenthetic glottal stop as it is always the case in German, Czech and other languages). Onsets consisting of one or two consonants are common. More complex onsets are infrequent:
  - (1) aria ['a:.r<sup>j</sup>æ] 'he ploughs' ragas ['ra:.ges] 'horn' stogas ['sto:.ges] 'roof'
  - (2) sprogsta ['spro:ks.tv] 'it explodes'
- Codas typically consist of:
  - a single sonorant:
    - (3) antis ['a'n<sup>j</sup>.t<sup>j</sup>ıs] 'duck'
  - one or two obstruents:
    - (4) būk [bu:k] 'be! (imp)' jusk [jʊsk] 'feel! (imp)'
  - a sonorant followed by one or two obstruents:
    - (5) ims ['ms] 'he will take' kirsk ['k<sup>j</sup>rrsk] 'cut! (imp)'
- Native vocabulary items avoid more complex codas.
- <sup>ICF</sup> Unlike in most other languages, medial clusters of the type [CR] (i.e. obstruent + sonorant) tend to have the syllable boundary go between the two segments, not before them (Steriade 1997):
  - mokykla [mɔ:.k<sup>j</sup>i:k.'lɐ], \*?[mɔ:.k<sup>j</sup>i:.'klɐ] 'school'
     cf. kloti ['klɔ:.t<sup>j</sup>i] 'to lay'

In other words, the general principle of putting as much material as possible into onsets is violated in Lithuanian.

- The same has been claimed for some CC clusters, as well:
  - (7) Asta [es.'te] *PN* cf. storas ['sto:.res] 'thick, fat'

#### 1.2 Weight and Timing Units

Syllable weight is very important in Lithuanian. Segments contribute to syllable weight in the following manner:

- Onsets are never moraic (which is often assumed to be a linguistic universal, but see Topintzi (2010) for counterevidence in Modern Greek);
- Short vowels are linked to one mora, long vowels are linked to two moras;
- Coda sonorants are moraic, but coda obstruents are not.

Most syllables in Lithuanian are either mono- or bi-moraic. Tri-moraic syllables (long vowel/diphthong + sonorant) are dispreferred: \*VVR. Thus, only underlyingly short vowels are allowed to be combined with a coda sonorant. The possible combinations are listed below:

$$(8) \qquad \begin{array}{cccc} \operatorname{ar} & \operatorname{al} & \operatorname{an} & \operatorname{am} \\ \operatorname{er} & \operatorname{el} & \operatorname{en} & \operatorname{em} \\ \operatorname{ir} & \operatorname{il} & \operatorname{in} & \operatorname{im} \\ \operatorname{ur} & \operatorname{ul} & \operatorname{un} & \operatorname{um} \end{array}$$

☞ In Lithuanian grammars, these are called *semi-diphthongs* or *diphthongal combinations*.

There was a general prosodic constraint in Old Lithuanian banning all extra-heavy syllables. In the modern language, however, a couple of inflectional endings have a long vowel followed by a coda sonorant. This also happens when the present-tense affix /-st-/ is added to certain verbs:

 (9) žmon+oms [zmo:.'norms] 'wives (Dat.Pl)' tol+st+a ['torls.tv] 'it moves away'
 But: tol+o ['tor.lor] 'it moved away'

### 2 Pitch Accent

Lithuanian is often described as a pitch-accent language. Accented heavy syllables are realized with one of the following two patterns:

• The falling pattern (tvitrapradė priegaidė) with a more prominent first mora. This is marked with the acute accent above the first nuclear element (unless it is  $\mathbf{i}$  or  $\mathbf{u}$ , in which case the grave accent is used):

- (10) výras 'man' kálnas 'mountain' láimė 'happiness' <u>But</u>: kìlti 'to rise' bùrtai 'sorcery'
- The rising pattern (tvirtagalė priegaidė) with a more prominent second mora. This is always marked with a tilde above the second moraic vowel or the moraic sonorant of the coda. In case of a long monophthong, the tilde is placed above the only vowel letter:
  - (11) ũpas 'mood' kaltas 'guilty' urvas 'den' larvas 'ship'
- Accented light syllables (containing a short vowel and no sonorant in the coda) do not have different pronunciation patterns and are always marked with the grave accent:
  - (12) bùtas 'apartment'
    bìtė 'bee'
    žmonà 'wife'
    nèšti 'to carry'
- If the short vowels  ${\bf a} \; / \; {\bf e}$  are length ened (see Lesson 01), they are always pronounced with the rising pattern:
  - (13) nèšti 'to carry'  $\rightarrow$  něša 'he carries' kàsti 'to dig'  $\rightarrow$  kãsa 'he digs'
- In non-linguistic texts, accents are normally not marked. They can, however, be found in most decent dictionaries.

The pronunciation of the two patterns on heavy syllables depends on the segmental content in them. The difference between the two intonations is most obvious in syllables where the two moras are linked to two heterogeneous elements, i.e. two featurally different vowels or a vowel and a sonorant. In these instances, the more prominent mora is pronounced with more clarity, more intensity and half-long. If the less prominent mora contains a vowel, the latter will be somewhat reduced in quality:

	a.	kálnas [[ká·lnɐs]]	'mountain'	kal̃tas [[kʌĺ·tɐs]]	'guilty'
(14)	b.	gyvénti [[g <sup>j</sup> iːv <sup>j</sup> ǽ·n <sup>j</sup> t <sup>j</sup> ɪ]]	'to live'	meñkas [[m <sup>j</sup> ɛ̈́ŋ'kɐs]]	'lame'
	c.	ìndas [[í•ndes]]	'Indian'	iñdas [[ïń•dɐs]]	'dish, bowl'
	d.	kùrti [[kú r <sup>j</sup> t <sup>j</sup> ɪ]]	'to create'	kur̃sti [[köŕ <sup>j</sup> ·s <sup>j</sup> t <sup>j</sup> ı]]	'to go deaf'
	e.	láuk [[lá·wk]]	'wait! (imp)'	laũk [[lɒớ·k]]	'get out!'
	f.	láisvė [[lá•jsu <sup>j</sup> eː]]	'freedom'	laĩvas [[lʌíʲʊɐs]]	`ship'
	g.	téisė [[t <sup>j</sup> ǽ·js <sup>j</sup> eː]]	'right, law'	teĩsmas [[t <sup>j</sup> ɛí·smɐs]]	'court'

In case the accented syllable contains a long monophthong (or the monophonemic diphthongs  $/\underline{\mathfrak{u}}/, /\underline{\mathfrak{u}}_2/$ ), the primary cue is tone (falling for the falling pattern and level for the rising pattern). Also, syllables with the rising pattern may have a slightly higher length:

(15)	a.	kóšė [[kɔ̂ː∫ <sup>j</sup> eː]]	'he drained/sluiced'	kõšė [[k코ı∫ <sup>j</sup> eɪ]]	`porridge'
	b.	víenas [[v <sup>j</sup> íènɐs]]	'one'	sniẽgas [[s <sup>j</sup> n <sup>j</sup> īēgɐs]]	`snow'

 $\square$  In most urban verneculars, there is a strong tendency to eliminate tonal distinctions on long monophthongs and the two monophonemic diphthongs.

In contemporary analyses of Lithuanian stress patterns (e.g. Blevins (1993)), stress and pitch accent are unified in analyzing stress as a H-tone linked to one of the moras within a phonological word. If a syllable has two moras, the stressed one will determine the intonation of the syllable.

$$(16) \begin{array}{ccc} \sigma & \sigma \\ | \backslash & | \\ \mu \mu & \mu \\ | \\ H \end{array}$$

 $\square$  Unstressed syllables do not distinguish intonations. If a syllable loses its accent, it will be pronounced in a neutral manner, similar to the pronunciation of the rising intonation.

(17) láiškas [[lá·jʃkes]] 'the letter'  $\rightarrow$  laiškè [[lʌɪʃ<sup>j</sup>k<sup>j</sup>ǽ]] 'in the letter'

## 3 Accent Place and Mobility

Within a phonological word in Lithuanian, there is always exactly one syllable with primary stress. The stress can fall onto any syllable:

(18)	a.	tù <i>'you'</i>
. ,	b.	kadà 'when'
	c.	júodas <i>'black'</i>
	d.	kambarỹs <i>'room'</i>
	e.	sveikātos 'health (Gen.Sg.)'
	f.	ãdata 'needle'
	g.	pasiuntinỹs 'messenger (Nom.Sg.)'
	h.	pamokìnti 'to teach'
	i.	prajuõkinti 'to make someone laugh'
	j.	pãsiuntinį 'messenger (Acc.Sg.)'

The position of stress is often distinctive:

(19)	a.	juodà	black.NOM.SG.F	júoda	black.INSTR.SG.F
	b.	baltì	white.NOM.PL.M	bálti	become.white

What makes Lithuanian interesting compared to many other Indo-European languages is that it has inherited a complex system of mobile accents from Proto-Indo-European. Thus, root and affixal morphemes in modern Lithuanian can be underlyingly accented or not. The constraint demanding that there be only one main stress per word ensures the deletions of all the underlying accents but one. Different geometric configurations of underlying accents lead to different ways of resolving clashes, resulting in interesting accentual patterns. These will be studies in detail in the classes dealing with inflectional morphology.

## 4 Summary

The most important points in this class:

- 1. Lithuanian syllables can be light and heavy. Extra-heavy syllables are extremely rare;
- 2. Both light and heavy syllables can bear word accent;
- 3. Both light and heavy syllables can be unstressed. Unaccented heavy syllables do not lose their length;
- 4. When accented, heavy syllables may bear a H-tone on their first or second mora (following Blevins (1993)), producing two intonations the falling pattern and the rising pattern respectively;
- 5. The phonetic cues used to distinguish between the two patterns:
  - duration (heterogeneous syllables);
  - segment reduction (the unstressed mora in heterogeneous syllables);
  - intensity;
  - pitch (primarily on monophthongs);
- 6. If a syllable loses its accent, the intonational differences are neutralized;
- 7. Any syllable within a phonological word may bear the primary stress;
- 8. There are accented and unaccented morphemes. When they are concatenated, various patterns are produced. Hence the accentuation patterns in declension and conjugation paradigms.

# Bibliography

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