Phonetic features of Luxembourgish intonation

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Luxembourgish as one of the youngest Germanic languages has not yet been investigated as thoroughly as other (European) languages. Particularly prosodic features have been neglected to date. By investigating Luxembourgish intonation, a part of this field will be developed further.

The purpose of this explorative study is the phonetic analysis of the Luxembourgish intonational inventory in order to gain an impression of the used contours for further phonologic analysis. Data is provided by six Luxembourgish native speakers performing spontaneous speech in an interview-like conversation and a reading task. The latter consists of carefully designed target sentences (cf. examples) embedded in a contextualizing situation. These target sentences were assigned to different categories such as WH-Questions, Yes/No-Questions (following Prieto et al. 2010-2014) as well as continuations (subdivided into pragmatic and syntactic continuations) and finals (following Gilles 2005). A total of 22 sentences, partly containing more than one intonation phrase, provided the data for this reading experiment. As for the spontaneous speech data only the substantial intonation phrases (Chafe 1994) were considered.

Examples:

WH-Question: Wéivill Eeër sinn nach do?

'How many eggs are left'?

Yes/No-Question: Hutt Dir Ananas?

'Do you have any pineapples?'

pragmatic continuation: Den Här Weber war net rosen, hie war schwäirosen.

'Mister Weber wasn't angry, he was furious.'

syntactic continuation: Du bass net nëmme liddereg, mee och nach frech.

'You are not only lazy, but also cheeky.'

final: Ech hunn e Répondeur.

'I've got an answering machine.'

Three phonetic features served as investigation parameters in the nuclear syllable: the horizontal *peak position*, the fall from the nuclear pitch peak to the lowest point after the nucleus (*PitchDiff*) (following Gilles 2005 for German dialects) and the minimum pitch in relation to the speaker's span (*PitchMinIP*), assigned to a quartile (cf. Figure 1). The latter contributes to the finding of a final boundary tone.

First results show that the analysed categories create subgroups each investigation parameters as shown in Table 1.

Table 1: summary of the results

Category	Peak Position	PitchDiff	PitchMinIP
wh-question	middle (41-60%)	big fall*	4 th quartile
y/n-question	early (0-40%)	big fall (here: 18st)	4 th quartile
pragm.cont.	early	big fall	3 rd to 4 th quartile
synt.cont.	late-very late (61-140%)	small fall	2 nd to 3 rd quartile
final	early	big fall	4 th quartile

^{*}big fall = median of 11st, small fall = median of 7st

The most striking observations are, that syntactic continuations mostly display different results than the other categories, whereas finals and pragmatic continuations always show

similar values. Especially the latter observation provides opportunity for further investigation because consequently other parameters must be crucial to distinguish the two categories.

Figures

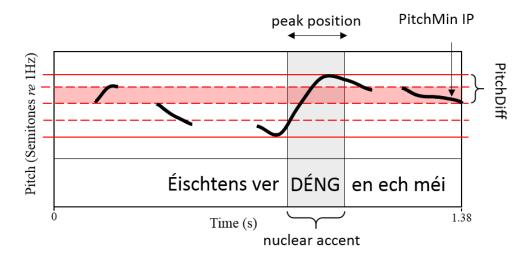


Figure 1: investigation parameters

References

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