

# Final devoicing of /l/ in Reykjavík Icelandic

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## Introduction

Icelandic has devoicing of sonorants, among them /l/, after voiced segments in "phrase" or "utterance"-final position (Árnason 2009, 2011; Helgason 1993; Thráinsson 1994); devoiced /l/ is realised as the voiceless lateral fricative [ɬ] :

**No devoicing:** Jón er á bíl í dag. [ˈpi:l]      **Devoicing:** Jón er á bíl. [ˈpi:ɬ]      (*John is on car (today); 'John is driving (today)'*)

## The Experiment (reading task, 12 female speakers)

- designed to test the environment of final devoicing of /l/ in Reykjavík Icelandic (four positions)
- target words were monosyllabic (syllable ending in /l/ stressed; e.g. *kál*) or disyllabic (syllable ending in /l/ unstressed; e.g. *blómkál*)
- final /l/, unless utterance-final, was followed by voiced (vowels) or voiceless (fricatives or plosives) segments

## Materials (examples; 56 target sentences overall)

### Condition 1: End of utterance (2x4 = 8 sentences)

- Í gær borðuðum við svínakjöt, kartöflur og **kál**. /k<sup>h</sup>au:l/
- Einu sinni eldaði mamma mín oft **blómkál**. /plou:m.k<sup>h</sup>au:l/

### Condition 2: End of clause/IP (2x2x4 = 16 sentences)

- [Í gær borðuðum við svínakjöt, kartöflur og **kál**] [en í dag ... ] / [sem bróðir minn ... ]
- [Einu sinni eldaði mamma mín oft **blómkál**] [en nú á dögum ...] / [sem hún keypti ... ]

### Condition 3: End of XP (2x2x4 = 16 sentences)

- Einu sinni eldaðum við [kartöflur og **kál**]<sub>NP</sub> á hverjum degi
- Á morgun þarf ég að kaupa [**kál**]<sub>NP</sub> fyrir kjötsúpuna
- Í morgun keypti sambýlismaður minn [**blómkál**]<sub>NP</sub> í Bónus
- Í Bónus keypti sambýliskona mín [**blómkál**]<sub>NP</sub> frá Spáni

### Condition 4: Within XP (2x2x4 = 16 sentences)

- Mér líkar [**kál** ömmu minnar]<sub>NP</sub> / [**kál** frænku minnar]<sub>NP</sub> sem hún eldar.
- Okkur þykir [**súrkál** ömmu okkar]<sub>NP</sub> / [**súrkál** systur okkar]<sub>NP</sub> frábært.

## Hypotheses

**H1:** Final devoicing occurs, and is likely to be obligatory, at the end of an utterance.

**H2:** Final devoicing occurs, and is likely to be obligatory, at the end of an IP, i.e. at the end of a clause in the syntax.

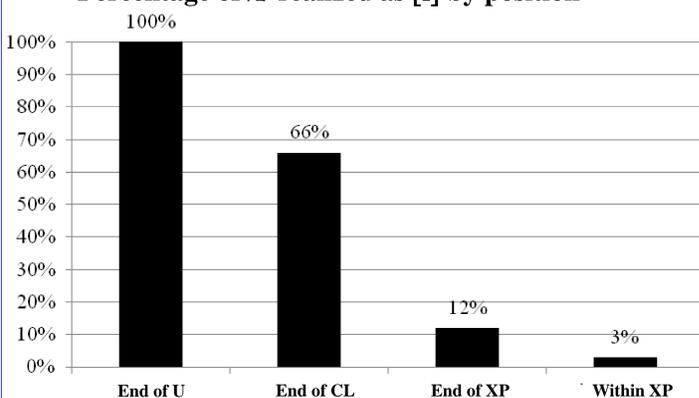
**H3:** Final devoicing may occur, if bounded by a level between PWd and IP, at the end of a syntactic XP, here: between object and adjunct, a position likely to coincide with a phonological phrase boundary in prosodic structure.

**H4:** Final devoicing does not occur XP-internally, a position likely to correspond to a PWd boundary in the prosodic structure.

## Results and Discussion

### 1) significant effect of position

Percentage of /l/ realized as [ɬ] by position



position	[l]	[ɬ]
1 (U-final)	0	96 (100%)
2 (Cl-final)	62	126 (66%)
3 (XP-final)	164	22 (12%)
4 (XP-internal)	182	6 (3%)

Table 1: Cross-tabulation of /l/ according to position and (de)voicing

### 2) no effect of stress or voicing of following segment

position	stressed		unstressed	
	[l]	[ɬ]	[l]	[ɬ]
1 (U-final)	0	48	0	48
2 (Cl-final)	32	62	30	64
3 (XP-final)	77	17	87	5
4 (XP-internal)	88	6	94	0

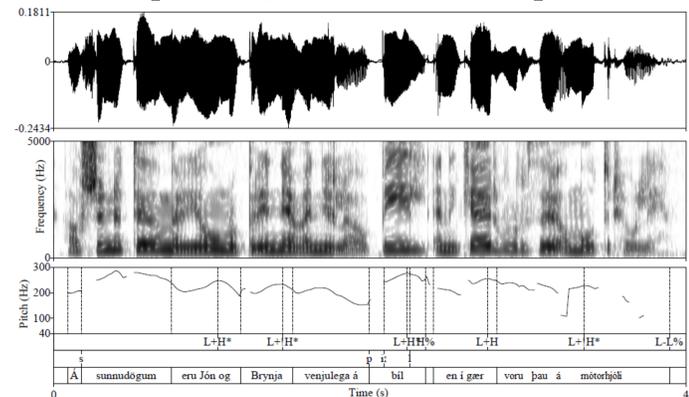
Table 2: Cross-tabulation of /l/ according to position, stress of target σ and (de)voicing

position	voiced		voiceless	
	[l]	[ɬ]	[l]	[ɬ]
1 (U-final)	0	0	0	0
2 (Cl-final)	19	77	43	49
3 (XP-final)	84	10	80	12
4 (XP-internal)	89	6	92	1

Table 3: Cross-tabulation of /l/ according to position, voicing of the following segment and (de)voicing

### Final devoicing of /l/ marks the end of the utterance (obligatory [ɬ]).

- Devoicing is frequent, but not obligatory at the end of the clause/IP (T% found in all clause-final positions); example of [l] in clause/IP-final position:



- Devoicing is clearly disfavoured within IP.

### Outlook:

- Focus, other sonorants, dialectal variation

## References

Árnason, Kristján. 2009. Phonological domains in Modern Icelandic. In J. Grijzenhout & B. Kabak (eds.), *Phonological Domains: Universals and Deviations*, 283-313, Mouton de Gruyter.  
 Árnason, Kristján. 2011. *The Phonology of Icelandic and Faroese*. OUP.  
 Helgason, Pétur. 1993. On Coarticulation and Connected Speech Processes in Icelandic. *Málvísindastofnun Háskóla Íslands*.  
 Thráinsson, Höskuldur. 1994. Icelandic. In E. König & J. van der Auwera (eds.), *The Germanic Languages*, 142-189, Routledge.

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