

Duration of word-initial sibilants in Soikkola Ingrian

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Finnic languages exhibit rich quantitative contrasts of consonants. However, in the word-initial position, these contrasts are neutralised, and consonants are considered phonologically short. In the Finnic varieties with ternary consonantal quantity (Estonian, Livonian, Soikkola Ingrian), the length contrast of consonants is expressed by two main phonetic cues: duration and (for *p*, *t*, *k*, *s*) voicedness/voicelessness, e.g. Soik. *tappā* ['tap:a:] 'kill:3SG' – *taḗpā* ['tap'a:] 'catch:3SG' – *tapa* ['taḗa:] 'kill:IMP'. Word-initial consonants in this case are usually phonetically short but voiceless.

In sandhi with a preceding word or (in compounds) root which ends in a vowel or a sonorant, the word-initial consonants can undergo two types of quantity-related sandhi processes: **lenition** (voicing) and **fortition** (gemination), e.g. Est. *sara-puu* 'hazel-tree' > ['sara:ḥu ~ 'sara:p:u(:)] (viz. Kettunen 1929; Ariste 1939; Posti 1942; Sovijärvi 1944; Virtaranta 1956; Tauli 1956; Itkonen 1975; Viitso 1979; Laanest 1986; Kuznetsova 2009). In general, lenition is more common across varieties; fortition occurs mostly in highly lexicalised compounds.

In Soikkola Ingrian, only lenition is typical for sandhi, both in compounds and in free phrases, e.g. *metsän kautā* ['metsän_ḡaut:ä] 'through the forest', *hāpa-pū* ['ha:bä_ḡbu:] 'aspens-tree' (cf. also Sovijärvi 1944: 29–30; Virtaranta 1956: 374; Laanest 1986: 12). Fortition has been attested in few compounds like *allā-(ḡ)päin* ['a:a:'p_äin ~ 'a:a:'ḡpäin] 'downwards' (Virtaranta 1956: 374) and, extremely rarely, in free phrases, like *tū vettä kottī* ['tu:_ḡv'et:ə 'kot:i:] 'bring water home' (author's field data). Most cases of fortition have been interpreted as traces of "border gemination" after the words historically ending in a consonant, e.g. *tū* <**tōk* 'bring:IMP' (Itkonen 1975: 377; Virtaranta 1956: 371) and analogical developments

However, our recent phonetic study on segmental durations in Soikkola Ingrian trisyllables showed that the word-initial **sibilant s**, in a sharp contrast to the stops *p*, *t*, *k* and other consonants, is usually phonetically **long**. Its median duration of 175 ms was close to that of intervocalic short geminates (cf. Figure 1, Kuznetsova et al. submitted) This does not seem a result of a sandhi fortition — on the contrary, it is an intrinsic durational property of this consonant, which is phonologically short in this position and can regularly undergo lenition and voicing in sandhi. Sovijärvi (1944) mentions as well that in Soikkola Ingrian, "in the beginning of the word ...there is a fortis-s, pronounced vigorously, in a Finnish manner" (p. 30), while also provides an example of its regular lenition in sandhi: *tüttōj_ḡzannō_ḡzenihallē* 'girl said to her fiancé' (p. 36).

This and other peculiarities of *s* in Soikkola Ingrian, placed against the background of cognate languages and the particular cross-linguistic features of sibilants, are further discussed in the talk.

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Figure 1. Durations of different word-initial consonantal types in Soikkola Ingrian trisyllables (3812 tokens). “C1 duration” refers to the duration of word-initial consonants in ms, while “C1 type” refers to the qualitative consonantal types. Mean durations of consonantal types (in ms) are reported within the boxes, and the numbers of tokens are given at the bottom below each box.

