Locality & Interpretation. Evidence from domino palatalisation in Polish

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Polish exhibits a domino effect of consonant palatalisation on coronal continuant obstruents. This is shown in (1), where [sp] and [$\wp p^i$] are both contained within the same root. The alternation between [s] and [\wp] is obligatory, and the choice of [s] vs. [\wp] is solely dependent on the phonological, not phonetic, value of [\pm back] on the following consonant. Thus, the fricative in question behaves as if it were directly palatalised by the underlying close front vowel //i//, where //s// \rightarrow [\wp]/_//i//, shown in (2), is an exemplification of word-internal Polish palatalisation (see, for instance, Gussmann 1980 or Rubach 1984). Crucially, this type of palatalisation is not merely phonetic. This is confirmed by the lack of //s// \rightarrow [\wp] palatalisation before //i// across a lexical boundary, shown in (3) (phonetic/surface palatalisation). Importantly, word-internal [s^i i] sequences are absent from the native (Slavic) vocabulary when pronounced in standard spoken Polish, and only occur in foreign words (see, for instance, Gussmann 2007: 6). It will be shown that the [\pm back] value of the dominopalatalised fricative '<u>C</u>' in word-internal <u>C</u>CV sequences need not be specified in the representation, as long as the fricative and the following consonant are bound by Locality.

Importantly, domino palatalisation is not attested if [s] and [p], or whichever two consonants, are separated by a prefix—root boundary, as shown in (4); notice that prefixes are non-cohering (non-cyclic, Class 2) in Polish, i.e. they are non-local to the left edge of the root. The domino effect may also be absent morpheme-internally, but only in foreign words, some of which are given in (5). It will be shown that due to the presence of an empty CV—used here to break Locality, which is a different purpose than in Lowenstamm (1996) or Scheer (2004)—the consonants flanking the prefix—root boundary are mutually invisible at a morphophonemic level of representation, built over the CVCV system (Scheer 2004).

It will also be shown that all native $C_{[-BACK]}(+)[i]$ sequences relevant to the discussion form a CV unit sharing the GP element {I} as their head (inspired by Gussmann 2007), while the fricative preceding the consonant followed by [i], when not specified for [–back] due to other factors, receives its phonologically-palatalised phonetic value, e.g. [¢] instead of [s^j], only during phonetic interpretation of the whole chunk. It will be claimed that foreign vocabulary can be exempt from being represented by means of such sequences, and that defective structures in which the consonant preceding //i// is not {I}-headed—these are assumed to be unproductive in native Polish phonology—are interpretable (following Michalski 2009) in a deterministic fashion (as anticipatory secondary POA assimilation).

Finally, it will be shown that if the prefix and the root are separated by an empty CV, the interpretative interface can easily distinguish, again in a deterministic way, between those fricatives which are bound to be pronounced as domino-palatalised and the rest.

Examples:

(1)

(1a) sp-a-c [spatc] 'sleep, v. (inf.)' sp-a-l-i [spal^ji] '(they) slept' (1b) $sp-i-\phi-e$ [cp^j(j) $\epsilon(\tilde{w})$]'(I) sleep' $\dot{s}p-i-j-\phi$ [cp^jij] 'sleep (sg.imperat.)'

- (2) $gtos [s] \sim gtos \underline{-i} \dot{c} [ci]$ 'voice, n.' ~ 'voice, v. (inf.)'
- (3) *pie<u>s i</u> kot* [s^ji] 'a dog and a cat'
- (4) $s \# p i c' [sp^{j}itc]$ 'make (sb.) drunk (inf.)' $s \# p - i - j - \phi [sp^{j}ij]$ '(id.sg.imperat.)'
- (5) spicz [spⁱitʃ] 'speech'
 spiker [spⁱikɛr] 'speaker'

(In some of the examples above, n-dashes mark cohering boundaries, while hashes mark noncohering boundaries.)

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