Split-component phonology and the duality of Polish palatalisation

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This paper advocates the idea that in order to explain distributional facts about palatalisation-related phenomena in Polish, one may find it useful to adopt a split-component model of phonology. The architecture of the model proposed here comprises two components, roughly corresponding to the lexical and the post-lexical components of Lexical Phonology, albeit built on different premises. Instead of binary features, the analysis will use monovalent features known as elements in Government Phonology. In the model proposed here they are used to build abstract morphophonemic representations in one component, while their phonetic value only appears as a result of processing in the other component. In other words, during word formation, the morphophonemic level converts abstract, not direct articulatory features. This is a sharp break from LP, where Polish palatalisation is analysed in cyclic terms with direct articulatory effects, for instance, in Rubach (1984).

Right-hand examples in 0 below show the word level context of stem-final [+back] consonants being palatalised by the so-called palatalising ([–back]) $//\epsilon//.^{1.2}$

pies [p ⁱ (j)ɛs] 'dog'	p <u>si-e</u> [cε] '(voc.)'
<i>kot</i> [kɔt] 'cat'	<i>ko<u>ci-e</u></i> [tɛɛ] '(voc.)'
<i>pan</i> [pan] 'Mr'	<i>pa<u>ni-e</u></i> [nɛ] '(voc.)'
stół [stuw] 'table'	<i>sto<u>l-e</u></i> [lɛ] '(voc.)'
<i>sznur</i> [ʃnur] 'rope'	<i>sznu<u>rz-e</u></i> [3ɛ] '(voc.)'

Contrary to 0, the right-hand examples in 0 below show the phrase level context of word-final [+back] consonants before //i// across the word break.

pies [p ^j (j)ɛs] 'dog'	<i>pie<u>s</u> i kot</i> [s ^j i] 'a dog and a cat'
<i>kot</i> [kɔt] 'cat'	$kot i pies [t^{j}i]$ 'a cat and a dog'
pan [pan] 'Mr'	<i>pa<u>n</u> i pani</i> [n ^j i] 'Mr. and Mrs'
stół [stuw] 'table'	<i>stó<u>ł</u> <u>i</u> krzesła</i> [w ^j i] 'table and chairs'
<i>sznur</i> [ʃnur] 'rope'	<i>sznu<u>r</u> i pętla</i> [r ^j i] 'a rope and a noose'

0 and 0 show distinct patterns of palatalisation, as one would not expect a *close* front vowel to fail to palatalise a preceding consonant when a *mid* front vowel succeeds. This generalisation dates back to Chen (1973).

In both cases, the [-back] vowel is represented as a GP expression in which the element {I} is the head. In the case of the palatalising $//\epsilon//$ the expression reads {A•I}, in the case of //i// it is {I} alone. These expressions are adopted from Gussmann (2007). It is claimed that in the case of 0 the element {I} spreads onto the preceding consonant, forming a CV in which {I} is the head of both the onset and the nucleus, as per Gussmann's (2007) *I-Alignment*. This is said not to be the case in 0, where separate words are taken not to form a single representation, and the {I}-sharing relation is not contracted.

¹ I use double slashes for morphophonemic values, and brackets for phonetic values.

² See Jassem (2003) for an IPA illustration of Polish phonetics.

These claims have distributional grounding. The underlined CV's in 0 can also be found morphemeinternally. The palatalised underlined CV's in 0 do not occur morpheme-internally in a single native word of Polish, as pronounced in standard spoken Polish. Furthermore, these combinations are not attested at root–suffix boundaries. They can, however, occur in foreign vocabulary, which points the following relation.³ CV's found across word boundaries can be admitted into the lexicon despite them not matching native CV patterns, but they stay non-productive, as the relation between the onset and the nucleus does not conform to *I-Alignment*, which appears to hold for all native vocabulary. Word boundary, however, is where *I-Alignment* cannot hold, as onsets and nuclei do not contract any *morphophonemic* lateral relation in this context.

Chen, Matthew. 1973. Predictive power in phonological description. *Lingua* 32: 173–191. Gussmann, Edmund. 2007. *The Phonology of Polish*. Oxford: Oxford University Press. Jassem, Wiktor. 2003. Polish. *Journal of the International Phonetic Association* 33, 1: 103–107. Rubach, Jerzy. 1984. *Cyclic and Lexical Phonology. The Structure of Polish*. Dordrecht: Foris.

³ See, for instance, Gussmann (2007: 1–8) for data and further references.