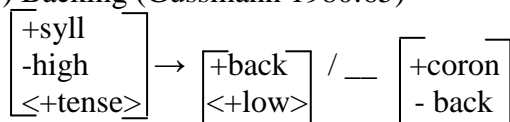


The classic account of the process of /ε/-Backing attested in Polish (see Gussmann 1980 among others) requires the reference to three types of lexical diacritics.

Diacritic Type 1 is the abstract feature [+/-tense], which has to be introduced to differentiate between /ε/s that are backed and lowered to /a/ and /ε/s that are backed and subsequently rounded to /ɔ/.

(1) Backing (Gussmann 1980:65)



Since there is no cross-linguistic evidence that tense vowels are prone to backing and lowering before coronal consonants, the use of feature [+tense] in (1) is an *ad hoc* use of the diacritic phonological feature (the notation could well be reversed with [-tense] vowels being lowered).

Diacritic marking Type 2 ([+rule]) has been postulated to account for the behaviour of those items in which vowel Backing has been regularly correlated with non-palatal quality of the following vowel (see (2) for examples).

(2) ¹	Forms in /aC/	Forms in /εC'/
a.	świ/at/	świ/εt̥c/+e
b.	obi/ad/	obi/εd̥z/+e
c.	kości/ɔt/+a	kości/εl/+e

It has been noted by Gussmann that such examples are less frequent than the cases in which Backing takes place despite the palatalization of the following consonant (see (3) below).

(3) ²	Form in /ε/	Adjective/Noun (Backing before non-palatals)	Adjective/Noun (Backing before palatals)
a.	wy+bi/εl/+i+ć	bi/ał/+y	bi/al/+i
b.	o+świ/εt̥c/+i+ć	o+świ/at/+a	o+świ/ate/+e
c.	za+mi/εz/+a+ć	za+mi/ar/	za+mi/aʒ/+e
d.	zi/εl/+n+y	zi/ɔł/+o	zi/ɔl/+e
e.	l/εt̥c/+e+ć	l/ɔt/	l/ɔt̥c/+e

Moreover, it has been observed that the items in which Backing applies in spite of the palatalization are mostly nonderived nouns and adjectives Gussmann (1980: 68-69).

A Type 3 diacritic ([-rule]) was required to account for what Gussmann (1980: 143) referred to as 'positive exceptions to Backing'. Such items are very numerous in Polish. They are immune to rule (1) and retain the front vowel before non-palatal consonants in all inflectional and derivational forms (see 4).

(4) ³	a. kobi/εt/+a	d. dzi/εł/+o
	b. maki/εt/+a	e. cz/εs/+ać
	c. bi/εd/+a	f. tl/εn/

The basic assumption of the analysis I present is that Phonology and Morphology cannot refer to arbitrary diacritic features ([+/-tense], [+/-rule]) which do not constitute the symbolic vocabulary they are designed to compute (see e.g. Scheer 2012).

My aim is, therefore, to investigate what genuine phonological and morphological properties are responsible for the exceptional nature of Polish /ε/-Backing.

I will analyse Backing as triggered by floating voc(alic) nodes marked for features [open] (if the output is /a/) or [open]+V-place node hosting feature [labial] (if the output is /ɔ/) (see

¹ Glosses: (a) 'world' - loc/voc, sg.; 'lunch' - loc/voc, sg; (b) church, gen, sg.' - loc/voc, sg., 'herb' - 'herbal, nom, sg.'

² Glosses: (a) 'to whiten' - 'white' - 'white, nom/voc, virile.'; (b) 'to enlighten' - 'education' - 'education, dat/loc, sg.'; (c) 'to intend' - 'intension' - 'intension, loc/voc, sg.'; (d) 'herbal' - 'herb' - 'herb, loc, sg.'; (e) 'to fly' - 'flight' - 'flight, loc/voc, sg.'.

³ Glosses: (a) 'woman'; (b) 'model'; (c) 'poverty'; (d) 'work of art'; (e) 'to comb'; (f) 'oxygen'.

Clements and Hume 1995). The anchoring of the vocalic nodes onto the stems provokes the mutation of /ε/ to /a/ or /ɔ/.

The floating nodes will be argued to be the realizations of categorizing n(ominal) and a(djectival) heads. Whereas the affix composed of the voc node and feature [open] will be assumed to be the default realization of n/a-heads, the choice of a floating voc node carrying features [open] and [labial] is the lexical property of a given root. That situation in which the realization of the categorizing n/v-head is sensitive to the idiosyncratic properties of the root is very common in Polish and cross-linguistically.

This analysis accounts for the observation that Backing is most prominent in ‘non-derived’ nouns and adjectives, i.e. nouns and adjectives without overt affixes.

The ‘positive exceptions to Backing’ (4) will not be assumed to be marked with a diacritic ‘[-rule]’ feature but rather analyzed as realizing the root and the categorizing n/v-heads by means of the stem exponents. Thus, while alternating nouns such as *oświata* /ɔɕv^ɨata/ ‘education’ (3b) realize the root as /ɕv^ɨet/ and the n-head as the vocalic node, items such as *bieda* /b^ɨeda/ ‘poverty’ (4c) realize both the root and the n-head as /b^ɨed/.

The items in which the palatalization of the stem-final consonant is always correlated with the front quality of the preceding vowels (see 2) will be assumed to behave morphologically like the items immune to rule (1) and realize both the root and the categorizing head by means of the stem exponent. They are also represented with underlying vowels /a/ or /ɔ/. Their regular behaviour is due to a peculiarity of their representation: in items in (2) V-place nodes hosting features such as [labial] or [coronal] are shared by the vowel and the following consonant. On the assumption that coronal palatalization is the anchoring of features [coronal] and [-anterior] on the closest V-place node, the palatalization of the stem-final consonant in such items must always be correlated with the front quality of the preceding vowel: both the vowel and the consonant share features [coronal] and [-anterior].

In sum, Type 1 diacritic ([+/-tense]) that differentiates between /ε/s that are lowered to /a/ and those that are rounded to /ɔ/ is eliminated. The Lowering is the default situation in which n/a-head is realized as a floating affix. The more marked Backing+Rounding scenario is the consequence of allomorphy of n/a-heads sensitive to the type of the root.

The Type 2 ‘[+rule]’ diacritic postulated for items which show a non-front vowel unless the following consonant is palatalized (see 2) is expressed by assuming a more conventional lexical properties of the relevant stems: they are represented with underlying /a/ and /ɔ/, realize both the root and the categorizing head, and their terminal VC sequence shares the V-place node and the features it subsumes.

Type 3 ‘[-rule]’ diacritic is replaced with the realizational properties of the immune stems in (4): they always realize the root+the categorizing head thus bleeding the realization of the n-head as the floating affix.

The analysis presented above dispenses with diacritics that are ‘alien’ to Phonology and Morphology but is also superior to the approach which postulates the suppletion analysis of Backing, which is forced to posit multiple lexical representations of a given stem. This is a situation that should be avoided if one accepts an Occam’s razor-based argument that new entities should not be postulated if there is a way of accounting for the empirical situation without postulating them. One should also remember that with every phonological representation of a stem there comes a stem-specific realizational statement that defines the context in which such a representation is inserted. Clearly such statements also burden the grammar and should be utilized only if there is no alternative and more economical way to account for the data.