

Templatic structure in Czech and Slovak

In Czech, the length of vowel-final prefixes alternates as under (1).

(1)

prefi x	VV	V	
o-	ú-tes	o-tesat	riff, cut
do-	dů-kaz	do-kázat	proof, prove
po-	pů-hon	po-hnat	summons, summon
při-	pří-sada	při-sadit	ingredient, add
za-	zá-pad	za-padnout	West, fall
na-	ná-nos	na-nosit	alluvial deposits, wash
			ashore
vy-	vý-plata	vy-platit	salary, pay

The goal of this presentation is to identify the morphological and phonological conditions the distribution of short and long variants obeys. I show that the prefix is sensitive to the length of the root-vowel as well as to the kind of suffix added.

The presentation considers one of the prefixes mentioned, that is *za-*. It is grounded on the exhaustive record of words prefixed with *za-* that is offered in the dictionary Ulbrich (1978). The first thing to be observed is that long prefixes occur only with nouns, while the same root displays short prefixes if it is verbal, cf. (1). Out of a total of 1575 items, 759 are verbal, against 816 nominal forms. 745 of the former come along with a short vowel, whereas nominal forms are both short and long: their prefix is long in 386 cases, against 439 short occurrences.

Vowel-final prefixes are to be regarded as lexically short because they also occur as prepositions *o*, *do*, *po*, *při*, *za*, *na*, in which case they are always short. For some reason, the verbal character of a form precludes a long prefix. The question to be raised is thus why some, but not all nominal items lengthen. I show that the answer comes again from the major class distinction: deverbal nouns take short prefixes, while denominal items show prefixal length.

For instance, the suffix *-Vn / -t* (*-en*, *-ěň*, *-an*, *-án*, *-t*) "past passive participle" always occurs with short prefixal vowels, while nominative singular case markers are observed with prefixal length. Compare for example the following instances of the roots $\sqrt{\text{bav}}$, $\sqrt{\text{duch}}$: **zá-bav-a**, **zá-duch-a** vs. **za-bav-en-í**, **za-duš-en-í**. The entire corpus of 816 nouns obeys this pattern.

However, this morphologically driven alternation is also subject to a phonological constraint: words where both the prefixal and the root-vowel are long do not exist, *zá- $\sqrt{\text{V}}$..VV. In case a long prefix is awaited for a noun that occurs with a long root-vowel, lengthening is blocked. Illustration thereof may be given by the agentive suffix *-ka* whose nominal character should provoke prefixal length.

(2)	zá - √...V...	zá - √...VV...			
	zadávká	zádržká	zámeček	zápůjčka	zášijek
	zahálka	zádumčivec	zámyčka	zármutek	zátočka
	zahálka	zádumčivost	záměnka	zárodečný	zátylek
	zahrádka	zádumčivý	záměrka	zárodek	závazek
	zahrádkář	záhumenek	záminka	zárodkový	závdavek
	zacházka	záchytká	zámotek	zářivka	závodčí
	zachránce	zájemce	zánožka	zásilka	závorka
	zachránkyně	zájemkyně	západka	zásmažka	závěrečný
	zajížd'ka	základka	zápalka	zásuvka	závěrka
	zakázka	záklopka	záporka	zástěrka	závěsek
	zakázkový	zákonodárce	zápisek	zástěrkář	závěska
	zanáška	zákožka	zápletka	zástěrkový	závlačka
	zarážka	zákrsek	zápletkový	zástrčka	zázvorka
	zastávka	zákusek	zápražka	zástřešek	
	zatáčka	záložka	záprška	zástupce	
	zavíjec	zálepka	záprtek	zástupkyně	

Vowel length in Czech prefixes is thus commanded by morphological and phonological criteria, whose hierarchy may be summarized as under (3).

(3)			yes	no
morphology	1.	last suffix (=word) verbal?	V	cf. 2.
	2.	first suffix verbal?	V	cf. 3.
phonology	3.	√...VV...?	V	VV

The phonological part of this conditioning is much the same as what is known as the Rhythmic Law in Slovak (Rubach 1993:173ff). Indeed in Slovak, a sequence of two long vowels is prohibited. When produced by morphology, the second vowel shortens. Illustration thereof appears under (4).

(4)			√...V... + suffix VV	√...VV... + suffix V
Adjectives	s	NOM sg	mal-ý	múdr-y
		GEN sg	mal-ého	múdr-eho
		DAT sg	mal-ému	múdr-emu
		-ský	dvor-ský	švéd-sky
nouns	DAT pl	fem	bab-ám	lúk-am
		neuter	zlat-ám	vín-am
	LOC pl	fem	par-ách	lúk-ach
		neuter	zlat-ách	vín-ach
	NOM pl	neuter	zlat-á	vín-a
		diminutive	hotel-ík	telefon-ik
	e	-ík	chleb-ík	džbán-ik
verbs	present	1° sg -iem	plet-iem	driem-em
		-ím	pros-ím	chvál-im
		-ám	vol-ám	rát-am
		3° pl -ú	plet-ú	driem-u

It is commonly held (e.g. by Rubach 1993) that the Rhythmic Law looks at any sequence

of two long vowels, regardless of their morphological status. However, all instances of this regularity in Slovak involve sequences where the first long vowel is root-internal, and the second of suffixal nature, cf. (4).

Stated in purely linear terms, the Czech prohibition of sequences of two long vowels looks like the reverse of the Slovak regularity: in Czech, the first vowel undergoes shortening, while in Slovak, the second vowel is affected. In Czech, the morphological condition on sequences of long vowels is obvious since two or three consecutive long vowels may occur as long as the particular morphological site [prefix + root] is not involved (e.g. *odsílání, házím, zpívání*). The Czech and Slovak behaviour may be unified if the view is taken that the morphological head, i.e. the root, always maintains length, while affixes shorten.

(5)	Slovak	[root + suffix]	constant quantity: 3 morae
		V + VV + V	
	Czech	[prefix + root]	constant quantity: 3 morae

Moreover, the result is trimoraic in all cases. We are thus facing a case of templatic morphology known from Afro-Asiatic languages. In Classical Arabic for instance, a given grammatical form implies a certain length for consonants and/ or vowels. For example, all verbs will geminate the second root consonant in causative forms (measure II), compare $\sqrt{\text{ktb}}$ *katab* "write" and *kattab* "cause to write". In case of biliterals where the lexicon provides only two consonants, the template is satisfied by creating a third consonant through spreading, i.e. $\sqrt{\text{md}}$ "extend" results in *madad*. This kind of non-concatenative morphology associates a constant vocalic and/ or consonantal pattern to a given morphological category. In Czech and Slovak, the morphological instance [affix + root] must be actualised by three morae.

Additional evidence for the existence of templatic structure in Czech comes from infinitives: a well-formed Czech infinitive must be bimoraic. Infinitives may bear two short vowels (*dělat*), one long vowel (*znát*) or a short vowel and a syllabic consonant (*trpět*). The fact that some roots lengthen in order to meet the bimoraic requested imposed by infinitives is witnessed by their short vowel in all other grammatical forms. *Znát* for instance is short if prefixed (*po-znat*) and in the past active participle (*znal*), *krást* is short in inflected forms (*kradu*,...) and the participle (*kradl*), the same holds for *dlít*, *prát* (vs. *vy-prat*), *stát se*, *růst* and so forth.

Afro-Asiatic and Indo-European languages are commonly opposed as to their templatic vs. non-templatic nature. If the above analysis of Czech and Slovak is correct, the absoluteness of this fundamental distinction is challenged. Moreover, it is remarkable that Slavic rather than other IE languages show templatic structures since the tolerance of heavy consonant clusters is commonly viewed as a consequence of non-templatic structure.

Rubach, Jerzy 1993. *The Lexical Phonology of Slovak*. Oxford: Clarendon.

Ulbrich, Rolf 1978. *Langenscheidts Taschenwörterbuch der tschechischen und deutschen Sprache. Erster Teil Tschechisch-Deutsch*. Berlin, München, Wien, Zürich, New York
¹⁰1993.