

Morphological and Phonological Domains: Prefix Lengthening in Czech

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Background Marantz (2001) distinguishes two types of nominalizations: root nominalizations (RN), where a category-defining head little n^o or a^o merges a categoryless root, and stem nominalizations (SN), where n^o or a^o merge a verbal head little v^o . The aim of my paper is to show that SN and RN differ not only morphologically (productivity vs. semi-productivity), syntactically (only SN operate over argument structure) and semantically (compositionality vs. non-compositionality), as assumed, but also phonologically.

Proposal My paper focuses on Czech prefixed nominalizations, of which some show prefix vowel lengthening. I argue that the lengthening is sensitive to the distinction between RN and SN: only in RN the prefix and the root form a single constituent which serves as a complement of little n^o or a^o heads. The distribution of vowel length within this morphologically defined domain is then controlled by a templatic constraint which counts the number of vocalic items (in the sense of Scheer 2001).

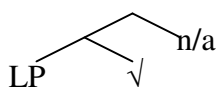
Data According to their phonological structure, Czech prefixes fall into two groups: V(owel)-final, i.e. open syllable, prefixes, e.g. *u-*, *za-*, *při-*, and consonant-final, i.e. closed syllable, prefixes, e.g. *s-*, *od-*, *nad-*. Here, I focus on the former type of prefixes whose final vowels alternate between short and long, i.e. *u-lú-*, *za-/zá-*, *při-/pří-* etc. Czech grammars interpret this alternation as follows: prefixes undergo lengthening when they occur in nouns. However, being incorporated into a noun is neither necessary nor sufficient condition for the prefix to lengthen. As illustrated in (1c,e), long prefixes occur not only in nouns, but also in verbs and adjectives respectively. On the other hand, examples in (1b) show that nouns often display short prefixes. From this it follows that the length cannot be sensitive to a lexical category of a word in which a given prefix ends up.

Analysis Following Svenonius (2004), I assume that prefixes are either L(exical), i.e. vP -internal, or S(uperlexical), i.e. vP -external. I argue that RN, which lack the verbalizing head little v^o , are prefixed only with lexical prefixes, while SN, where the little v^o is associated with the Th(eme) vowel, can contain superlexical prefixes as well. A prediction concerning prefix stacking, among others, arises that only SN can display double prefixation, which is born out; see (2). Prefixed RN then have a structure as in (3a): the lexical prefix forms a single constituent with the root to which a nominalizing head is merged. In prefixed SN the lexical prefix and the root form one constituent as before, the difference is that this constituent is now merged with a verbalizing head v^o to which a nominalizing head is attached (3b). Superlexical prefixes then sit higher than the little v^o , hence they don't form a constituent with the root (3c). I argue that prefix lengthening takes place in those structures in which a substring (3a), i.e. $[[\text{prefix+root}]n/a]$, is embedded. In other words, nouns, adjectives and verbs in (1a,c,e) share a piece of their morphological structure, a fact that has the same effect on the form of the prefix. Similarly, nouns, adjectives and verbs in (1b,d,f) also contain the same subtree, namely $[[\text{prefix+root}]v]$ (3b), which also has the same effect on the form of the prefix. The difference is that the phonology is active only if a constituent $[\text{prefix+root}]$ is c-commanded by a n^o or a^o head, otherwise the prefix shows its lexical identity, i.e. a short vowel. Following Scheer (2001) I further assume that the prefix lengthening is triggered by a templatic constraint which weighs 3 morae: when a $[\text{prefix+root}]$ domain is c-commanded by a n^o or a^o head then the 3moraic template is activated. In order to meet this 3moraic template, the prefix lengthens, i.e. becomes bimoraic (a long vowel weighs two morae, a short one one mora), when it merges the monomoraic root. By contrast, if a $[\text{prefix+root}]$ domain is c-commanded by a v^o head, no template is activated, hence the prefix need not lengthen. The

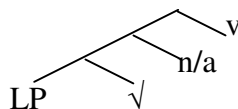
paper also discusses further consequences of this analysis concerning among others roots which weigh two morae and more.

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|---|--|
| <p>(1) a. nouns with long prefixes
 ú-lovek ‘catch’, vý-hra ‘win’
 ná-pad ‘idea’, při-liv ‘tide’
 c. verbs with long prefixes
 ú-činkovat ‘perform’, vý-tvarničit ‘work as designer’
 e. adjectives with long prefixes
 ú-ložný ‘suitable for storage’, vý-konný ‘executive’, ná-padný ‘striking’</p> | <p>b. nouns with short prefixes
 u-lovení ‘catch’, vy-hrání ‘win’
 na-padení ‘attack’, při-lití ‘addition’
 d. verbs with short prefixes
 u-činit ‘do’, vy-tvořit ‘make’
 f. adjectives with short prefixes
 u-ložený ‘stored’, vy-konaný ‘done’
 na-padený ‘struck’</p> |
| <p>(2) vy- klád -á -n -í
 LP-√root -thV=v^o-a^o-n^o
 ‘unloading, SN’
 vy- klád -k -a
 LP-√root -n^o -case/num
 ‘unloading, RN’</p> | <p>po-vy- klád -á -n -í
 SP-LP-√root -thV=v^o-a^o-n^o
 ‘distributed unloading, SN’
 *po-vy-klád-k-a</p> |

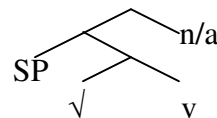
(3) a. [[LP+root]n/a]



b. [[[LP+root]v]n/a]



c. [[SP[root+v]]n/a]



(4) [[prefix+root]n]: 3moraic template
 [[u + lov]ek] > [[ú + lov]ek]
 1m 1m 2m 1m

References

- Karlík, Petr. 2007. Mixed nominals in Czech. In: M. Dočekal, P. Karlík & J. Zmrzlíková (eds.) *Czech in Generative Grammar*. München: Lincom. 105–117.
- Marantz, Alec. 2001. Words and things. Handout, MIT.
- Scheer, Tobias. 2001. The Rhythmic Law in Czech: Vowel-final prefixes. In: G. Zybatow & U. Junghanns (eds.) *Current Issues in Formal Slavic Linguistics*. Frankfurt am Main: Lang. 37–48.
- Svenonius, Peter. 2004. Slavic prefixes inside and outside the VP. *Nordlyd* 32:205–253.