

Non-prominent positions

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It is well known that positions that are in some sense prominent—either phonetically, like syllables with primary stress, or psycholinguistically, like first syllables of roots—are often given a privileged role in phonology. On the markedness side, there are elements that have an intrinsic connection with such positions: Heavy syllables and high-sonority segments like low vowels attract stress, vowels occupy the peak position in a syllable, etc. On the faithfulness side, elements occupying prominent positions are protected against deletion and change by special and often high-ranking versions of faithfulness constraints ("positional faithfulness"). Not unknown, but less appreciated is the fact that non-prominent positions also have special properties, properties which do not simply derive from the absence of prominence, as the "elsewhere" case.

It is of course clear that there is a special affinity between low-sonority items and margins of syllables (Prince and Smolensky's margin hierarchy of constraints). This paper is a small contribution to the phonology of non-prominent positions, focusing on the weak position of a foot ("foot-tail")—which is different from the simply unstressed, which encompasses the unfooted and the foot-tail alike. On the markedness side, we demonstrate the existence of constraints demanding that certain elements must occupy a foottail position. For example, in German antepenultimate stress is very common in words with an open penult like *in*(*kogni*)*to* or *A*(*napho*)*ra* (where brackets indicate foot boundaries). But when the final syllable is occupied by schwa, it is vanishingly rare (encountered mostly in inflectional paradigms, where Output-Output constraints are at play). What we find instead is consistent penult stress:

- (1) Tro('phäə) Lokomo('tivə) Kara('wanə) 'trophee' 'locomotive' 'caravan'
 Me('thodə) Zi('tronə) Anti('lopə) 'method' 'lemon' 'antelope'
 Ta('petə) Ok('tobər) O('boə) 'wallpaper' 'October' 'oboe'

Forms like *(*Trophä*)ə or **Loko*(*moti*)və are not just absent, but are judged as ill-formed by native speakers. This can obviously not be explained by pointing out that schwa-syllables avoid the word stress—rather, they seek the shelter of a preceding stress. We interpret this as evidence for a constraint FOOTTAIL-ə which requires schwa-syllables to occupy the weak position of a foot. Further evidence from wide-spread allomorphic phenomena having the same prosodic target of placing schwa-syllables into foot tails will be presented.

On the faithfulness side, just as there are constraints demanding that elements occupying prominent elements in the input must occupy prominent positions in the output (the "MAX"-side of things), there are constraints requiring elements in non-prominent positions in the input must remain so in the output (the "DEP"-side of things). This is of course well-known for ultimately non-prominent—namely, non-existent—items in the input, as evidenced by the avoidance in many languages to place stress or accent on epenthetic vowels. For example, while in Japanese loanwords (refs. omitted) final voiceless stops in the source word are usually geminated (2a), this is not the case when this would mean that pitch accent falls on an epenthetic vowel (2b) (cf. also AN.dé.ru.sEN, 'Andersen' vs. AN.dáa.SON 'Anderson').

- (2) a. 'stop' su.to[˥]p.pu, 'flat' b. 'help' he[˥].ru.pu *heru[˥]ppu, 'duct' da[˥].ku.to,
 fu.ra[˥]t.to, 'block' bu.ro[˥]k.ku *daku[˥]tto, 'mask' ma[˥].su.ku, *masu[˥]kku

Still more interesting are facts like the following. It is well known (refs. omitted) that there is a strong preference for four-mora nouns of the form $\check{\sigma}\check{\sigma}\check{\sigma}\check{\sigma}$ to be unaccented: *amerika*[˥], *akachia*[˥] 'acácia', *azarea*[˥] 'azálea', *mararia*[˥] 'malária', etc., i.e. without preservation of the English stress. In earlier work we have shown that their unaccentedness has its roots in the foot structure ($\check{\sigma}\check{\sigma}$)($\check{\sigma}\check{\sigma}$), where underlining indicates the head of the foot. Epenthetic vowels, however, disturb this pattern and often lead to accentedness, as in examples like *ada*[˥]*ruto* 'adult', *oka*[˥]*ruto* 'occult', *pure*[˥]*suto* 'presto', etc. One interpretation of this pattern is not as preservation of the source language prominence (which is preferentially overridden by default unaccentedness, see above), but rather as preservation of the prosodically dependent position of the consonant in the source word, viz. as a syllable coda. In the loanword, it is faithfully preserved as a foot tail position: *pres.to* > *pu*(*resu*)*to*, not *(*pure*)(*suto*). This parse, however, leads to accentedness: *pu*(*re*[˥]*su*)*to*.