## Prosodic word recursion in pseudo-compounds in Finnish

Daniel Karvonen
UiT The Arctic University of Norway
daniel.h.karvonen@uit.no

In addition to true morphological compounds, Finnish has a group of words that can be termed "pseudo-compounds" (Kiparsky 2003, Karvonen 2005), words which are morphologically simplex but behave like morphological compounds phonologically. Consider the stress patterns of the following three sets of Finnish words which behave differently under case suffixation:

- (1) Simplex words stress shifts to right
  ká.le.và.la 'Kalevala' ká.le.va.làs.sa 'Kalevala-INESS'
  pró.fes.sò.ri 'professor' pró.fes.so.rìl.la 'professor-ADESS'
- (2) Compound words no stress shift sá.la.sà.na 'password' sá.la.sà.nas.sa 'password-INESS' kó.ti.kỳ.lä 'home village' kó.ti.kỳ.läs.sä 'home village-INESS'
- (3) Pseudo-compound words no stress shift fí.lo.sò.fi 'philosopher' fí.lo.sò.fil.la 'philosopher-ADESS' és.pla.nà.di 'esplanade' és.pla.nà.dil.la 'esplanade-ADESS'

In the simplex words in (1), stress shifts to the right when a case ending is added due to the requirement that a secondary stress peak be located as close as possible to the right edge of the word without being final (Karvonen 2005). By contrast, in the morphological compounds in (2), rightward stress shift does not occur under suffixation, due to the requirement that stress occur on the initial syllable of each member of the compound. Although morphologically simplex, the pseudo-compounds in (3) behave phonologically like the morphological compounds in (2), since no rightward stress shift occurs, as it does in the simplex words in (1). Some kind of mechanism is thus required to prevent stress shift in the pseudo-compounds in (3). I propose that the lack of stress shift seen in pseudo-compounds is due to the presence of an underlying prosodic word, so that a simplex word such as "professori" would be underlyingly simply /professori/ while a pseudo-compound like "filosofi" would have the following underlying structure: /filo[sofi]<sub>00</sub>/.

Pseudo-compounds also behave differently with respect to vowel harmony. Finnish has a fairly straightforward front/back harmony system with the vowels [i] and [e] behaving as neutral (Ringen & Heinämäki 1999). In true morphological compounds, suffixes always harmonize with the second constituent of the compound, regardless of the qualities of the vowels in the first constituent. However, disharmonic pseudo-compounds can allow both front and back vowel suffixes (Ringen & Heinämäki 1999), although the details are fairly nuanced. Assuming the domain of vowel harmony to be the prosodic word, the optionality in suffixal harmony seen in pseudo-compounds can be understood to follow from the proposed distinction in prosodic structure, since simplex words, morphological compounds, and pseudo-compounds all have distinct prosodic structure on the surface:

(4)		Simplex words	Compounds	Pseudo-compounds
	M-structure:	{ X }	$\{ \{X\} \{Y\} \}$	{ X }
	P-structure:	$[  \dots  ]_{\omega}$	$[ [ \dots ]_{\omega}  [ \dots ]_{\omega} ]_{\omega}$	$[ \dots [ \dots ]_{\omega}]_{\omega}$

Allowing for recursive prosodic words in pseudo-compounds thus results in a principled understanding of their behavior with respect to both stress placement and vowel harmony due to distinctions in underlying and surface prosodic structure, instead of alternative solutions such as lexical marking of stress.

## References

Karvonen, Daniel (2005) *Word prosody in Finnish*. Doctoral dissertation, University of California, Santa Cruz.

Kiparsky, Paul (2003) Finnish Noun Inflection. In *Generative approaches to Finnic and Saami linguistics*, ed. Diane Nelson and Satu Manninen, 109-161. Stanford, CA: CSLI Publications.

Ringen, Catherine O., & Heinämäki, Orvokki (1999) Variation in Finnish vowel harmony: An OT account. *Natural Language & Linguistic Theory*, *17*(2), 303-337.