A moraic mismatch in Finnish: The status of coda consonants

The claim that there is a direct connection between the size of the minimal word in a given language and its minimal stress foot was first made in McCarthy & Prince 1986 and was subsequently developed and refined in Hayes 1995, among others. The argument for a relationship between the two follows from the commonly accepted version of the Prosodic Hierarchy (Selkirk 1981, 1986; Nespor & Vogel 1986) and the Strict Layer Hypothesis (Selkirk 1984; Nespor & Vogel 1986). Since each element of the hierarchy dominates the category immediately below it, and assuming that the smallest word in a language is a prosodic word, this prosodic word must also contain a stress foot, which is typically bimoraic. There are indeed many languages which exhibit a direct connection between minimal stress foot and minimal word. For example, there are languages like Eastern Ojibwe which allow CVV and CVCV words but exclude CVC words, due to the fact that only vowels are moraic in the language. However, as some researchers (Garrett 1999, Gordon 1999, Downing 2006) have pointed out that there are many counter-examples to this correlation, suggesting that it is a tendency at best. Such mismatches present a problem for the view that minimal word requirements are strictly linked to minimal stress feet in a language, which leaves us with the problem of explaining why such mismatches occur.

Finnish is an example of a language where there appears to be a mismatch between the status of CVC syllables with respect to secondary stress facts and minimal word effects. Coda consonants in Finnish pattern as moraic with respect to secondary stress facts, since CVC syllables generally attract stress. However, in words with word-internal adjacent CVC and CVV syllables, CVV syllables always attract stress over CVC syllables, suggesting a three-way distinction in syllable weight, CVV > CVC > CV. To complicate matters further, coda consonants always pattern as non-moraic with respect to minimal word facts, since CVC words are not attested in the language, and words must be minimally CVV or CVCV.

I propose that this apparent conundrum can be understood in a fairly straightforward way. I show that coda consonants are underlying non-moraic in Finnish, but can become moraic with respect to the stress facts in Finnish via the distinction between distinctive vs. coerced weight (Morén 1999), combined with the notion of context-dependent weight (Kager 1989, Hayes 1994, 1995, Alber 1997, Rosenthall and van der Hulst 1999, and Morén 1999, 2000). CVV syllables are specified underlyingly as bimoraic, while both CV and CVC syllables are specified underlyingly as monomoraic. CVC syllables then optionally become moraic on the surface via Weight-by-Position (Hayes 1989, Morén 1999). Additionally, the fact that CVV syllables always attract stress, while CVC syllables only are stressed in the absence of CVV syllables is due to a general correspondence constraint requiring surface moraic consonants to be underlyingly moraic. Finally, coda consonants are prevented from becoming moraic via coerced weight to form bimoraic CVC content words due to final consonant extrametricality, which is independently motivated in Finnish. The moraic mismatch in Finnish is thus only apparent, and can be explained by overriding factors determining the moraic status of codas using standard Optimality Theoretic constraints.

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