

Morphologically conditioned footing in Inari Saami

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Inari Saami, a seriously endangered Finno-Ugric language spoken in Northern Finland, displays an interesting interaction between default and morphologically-conditioned foot construction. I will argue that certain suffixes in the nominal paradigm require the construction of a domain-final monosyllabic foot.

The point of departure for this claim is a set of facts concerning the durations of vowels. These facts are described in a number of detailed works on Inari Saami, beginning with Äimä (1918) and Itkonen (1946, 1986–1991). These early findings are largely verified in more recent work by Sammallahti (1984), Sammallahti and Morottaja (1993), and Bye et al. (2008).

Inari Saami distinguishes three vowel durations, short (V), ‘half-long’ (V[•]), and long (V^ː). In nominal paradigms, we find alternations between short and long in the initial (main-stressed) syllable, and long and half-long in second syllable. Representative paradigms are shown in (1) and (2), which illustrate a disyllabic vowel stem and a disyllabic consonant stem respectively. Other vocalic alternations in quality and the alternation in consonant quantity (consonant gradation) will not be the focus here. The case/number suffixes added to vowel stems are generally of the shape /-C(C)/, while those added to consonant stems are /-VC(C)/.

(1)	<i>kove</i> , ‘picture’		(2)	<i>eemeet</i> , ‘wife’	
	SG	PL		SG	PL
	NOM	kóv [•] e		NOM	é ^ː m [•] e:t
	GEN	kóv [•] e		GEN	é ^ː m [•] e:tijj
	ACC	kóv [•] e		ACC	é ^ː m [•] e:t
	ILL	kóv [•] a:n		ILL	é ^ː m [•] e:t ^ː a:n
	LOC	kó ^ː v [•] e:st		LOC	é ^ː m [•] e:tist
	COM	kú ^ː v [•] i:r:jn		COM	é ^ː m [•] e:t ^ː a:r:jn
	ESS			ESS	é ^ː m [•] e:tin
	PART	kóv [•] e:r:t		PART	é ^ː m [•] e:tit

As (1) and (2) show, the distribution of half-length and full length in σ_2 in the paradigms of *kove* ‘picture’ and *eemeet* ‘wife’ complement each other exactly. Whenever the second syllable of *kove* has half-length, the second syllable of *eemeet* has full length, and vice versa. (Although shortening applies before /jj/.) The distribution of short and full length V in σ_1 behaves in a similar way. Whenever the first syllable of *kove* is short (or half-long when the vowel in σ_2 has been shortened from /ee/ to [i]), the first syllable of *eemeet* is long, and vice versa.

The explanation for these distributions is argued to be found in the foot structure, which is contrastive in Inari Saami. The locative and comitative singular suffixes, the accusative, illative and locative plural suffixes and the numerically unmarked essive and partitive suffixes are subject to a language-specific restriction that they attach to a monosyllabic foot at the end of the stem (alternatively, assign stress to the immediately preceding nucleus). This is also the case for stem-final consonants in consonant-final stems like *eemeet*. The paradigms in (3) and (4) show the result of placing the final monosyllabic foot and applying default foot construction over the remainder.

(3)	kóvvee , ‘picture’		(4)	éemèet , ‘wife’	
	SG	PL		SG	PL
	NOM (kóvvee)	(kóveeh)		NOM (ée)(mèet)	(ée)(mèeteh)
	GEN (kóvee)	(kúuvijj)		GEN (ée)(mèet)	(ée)(mèetijj)
	ACC (kóvee)	(kúu)(vìjijt)		ACC (ée)(mèet)	(émee)(tìjijt)
	ILL (kónvaan)	(kúu)(vìjijt)		ILL (ée)(mèetΔn)	(émee)(tàajjt)
	LOC (kóo)(vèest)	(kúu)(vìjijn)		LOC (émee)(tìst)	(émee)(tìjijn)
	COM (kúu)(vìijn)	(kúuvijj)(kùjjm)		COM (émee)(tàajjn)	(ée)(mèetijj)(kùjjm)
	ESS	(kóv)(vèen)		ESS	(émee)(tìn)
	PART	(kóv)(vèet)		PART	(émee)(tìt)

The two vowel length alternations may then be understood as follows. In σ_1 , there is an alternation between short and long V. Long V is a result of FOOT BINARITY under the requirement of INITIAL MAIN-STRESS and preservation of the underlying foot structure (PROSFAITH). Satisfaction of FTBIN takes precedence to faithfulness to underlying weight (WT-IDENT).

(5)	kovee+`st	PROSFAITH	INITMAINSTR	FTBIN	WT-IDENT
a.	(kóveest)	*!			
b.	ko(vèest)		*!		
c.	(kó)(vèest)			*!	
d.	☞ (kóo)(vèest)				*

The alternation between half length and full length, on the other hand, is phonetic, not phonological. As the nucleus in a monosyllabic foot, a phonologically long vowel is realized as longer than elsewhere (where it is only ‘half long’).

In sum, Inari Saami has a typologically unusual contrast involving final monosyllabic (secondary stress) feet, which are morphologically assigned. This analysis clarifies otherwise unexplained facts about Inari Saami phonology and phonetics.

References

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