

A NONAGREEMENT ANALYSIS OF HARARI VOWEL-CONSONANT PALATALIZATION

RADU CRAIOVEANU & ROSS GODFREY, UNIVERSITY OF TORONTO

THEORETICAL MOTIVATIONS

- Agreement by Correspondence (ABC) emphasizes **similarity** of corresponding segments (e.g., Hansson, 2001; Rose and Walker, 2004). Therefore, a language should not establish vowel-consonant correspondences (V↔C) if it doesn't have V↔V or C↔C as well.
- Harari does not display these correspondences.
- Thus, long-distance VC interactions in languages like Harari **should not** be analyzed as cases of ABC. These cases are ripe for reexamination through available analyses (e.g., floating features, spreading).
- We seek to provide a more satisfactory analysis of Harari long-distance palatalization, and also strengthen the idea that all agreement relationships should be mediated by similarity-based correspondence.

LONG-DISTANCE PALATALIZATION (LDP) IN HARARI

- In Harari (Ethio-Semitic), the **2nd person feminine singular suffix** *-i* triggers palatalization of **coronal obstruents and sonorants** in the stem. This is easiest to see with imperatives.

(1)	MASC. IMP.	FEM. IMP.	
a.	libəs	libəʃ-i	'dress!'
b.	kifəl	kifəj	'pay!'
c.	kitəb	kitfəb-i	'write!'
d.	hinək	hinək'-i	'strangle!'
e.	sixər	ʃixər-i	'be drunk!'
f.	a-t-a-bargi	a-tf-a-barg-i	'don't startle!'

- When a coronal sonorant is stem-final and a coronal obstruent appears earlier in the stem, **both get palatalized** (Rose 2004, (7)).

g.	xidən	xidʒən-i	'cover!'
h.	gidəl	gidʒəj	'kill!'

- Palatalization of multiple coronal obstruents is **optional** (Rose 2004, (12)).

i.	bit'əs	bit'əʃ-i, bit'əʃ-i	'rip!'
j.	sidəb	sidʒəb-i, ʃidʒəb-i	'insult!'

SPREADING, DOCKING, AND BLOCKING

- Before considering an analysis involving **spreading** and **floating features**, some further data must be introduced.
- Harari also has a **local palatalization** process, seen in words with agentive *-i*, hospitable to a spreading analysis.

	ROOT	AGENTIVE	
(2) a.	√hrs	hərəʃ-i	'one who ploughs'
b.	√gdI	gədəj	(*gədəʒaj) 'one who kills'
c.	√dlg	dəlag-i	(*dəʒəlag-i) 'one who works'

- In addition, while Rose argues that Harari LDP does not display blocking effects, these could simply be **difficult to detect** due to rampant optionality of multiple palatalization. Consider the following data, which is amenable to a floating feature analysis.

	PREFERRED	DISPREFERRED	
d.	a-t-birər	a-tf-birər-i	a-t-birər-i 'don't fly!'
e.	a-t-bifək'	a-t-bifək'-i	a-tf-bifək'-i 'don't be soaked!'

- If underlying /f/ gets **vacuously palatalized**, we can understand the acceptability of [a-tf-bifək'-i] as following from the same mechanism that allows optional multiple palatalization of coronal obstruents, which is also dispreferred for many speakers.

REFERENCES

- Hansson, Gunnar Ólafur. 2001. Theoretical and typological issues in consonant harmony. PhD dissertation, UC Berkeley.
- Rose, Sharon. 2004. Long-distance vowel-consonant agreement in Harari. *Journal of African Languages and Linguistics* 25:41–87.
- Rose, Sharon, and Rachel Walker. 2004. A typology of consonant agreement as correspondence. *Language* 80:475–531.
- Wolf, Matthew. 2007. For an autosegmental theory of mutation. In *Papers in Optimality Theory III*, ed. Leah Bateman, Michael O'Keefe, Ehren Reilly, and Adam Werle, 315–404. Amherst: University of Massachusetts, Graduate Linguistic Student Association.

UNDERLYING FORMS AND CONSTRAINTS

- In our analysis, the LDP-triggering suffix has the underlying form in (3).

$$(3) \quad / [+PAL] \quad i \quad /$$

$$\quad \quad \quad |$$

$$\quad \quad \quad \times$$

- This suffix consists of a **floating [+PALATAL] feature**, followed by the **phoneme /i/** (which is itself [+PALATAL]). See Wolf (2007) for an earlier OT treatment of affixes with both segmental and floating content.

- We use the following constraints in our analysis:

1. ***[±PAL]i**: Nonepenthetic [i] and a segment immediately to its left may not bear individual [±PAL] features. This constraint enforces local spreading.
2. **IDENT[+PAL]-IO: (i)** A segment that is [+PAL] in the input must be [+PAL] in the output; **(ii)** If there is an unlinked [+PAL] feature in the input, there must be an instance of [+PAL] in the output belonging solely to a stem segment.
3. **IDENT[+PAL]-OI**: If there is an instance of [+PAL] belonging solely to a stem segment in the output, then either **(i)** that segment must be [+PAL] in the input, or **(ii)** the input must contain an unlinked [+PAL] feature.

PREFERRED MULTIPLE PALATALIZATION

- Cases of preferred multiple palatalization are reanalyzed as the result of **two processes**: local spreading of the [+PAL] feature from /i/ and docking of the floating [+PAL] feature on the suffix. (Segments within parentheses share a [PAL] feature.)

/fit'ən-[+PAL]i/	*[±PAL]i	IDENT[+PAL]-IO	IDENT[+PAL]-OI
a. fit'əni	*!		
b. fit'ə(ni)		*!	
☞ c. fit'ə(ni)			

OPTIONAL MULTIPLE PALATALIZATION

- We use competing grammars to capture optionality. In the alternative grammar, we see the **emergence of ABC effects**; we analyze optional multiple palatalization as agreement of consonants by correspondence.
- The formulation of the IDENT constraints allows this agreement to be **limited to cases where palatalization is triggered by a floating feature**.
- Additional palatalization does not incur extra violations of IDENT[+PAL]-OI when there is a floating feature in the input.

Alternative grammar

/sidəb-[+PAL]i/	ID[+P]-IO	IDCC[PAL]	ID[+P]-OI	CORR-T↔T
a. ʃidʒəbi				*!
b. sidəbi	*!			
c. sidʒəbi		*!		
☞ d. ʃidʒəbi				

/saʃa/	ID[+P]-IO	IDCC[PAL]	ID[+P]-OI	CORR-T↔T
☞ e. saʃa				*
f. sata	*!			
g. saʃa		*!		
h. ʃaʃa			*!	

AN OUTSTANDING ISSUE

- How should the special behaviour of sonorants in (1g–h) be treated?
- Our analysis predicts that stems with both medial and final coronal obstruents should undergo preferred multiple palatalization, contrary to reports by Rose. This could be explained if local spreading preferentially affects sonorants, but this is yet to be confirmed.