Positive Positional Licensing and Overshoot in Tudanca Montañés

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Overshoot

- Tudanca Montañés (Romance; Spain): final high vowels centralize (=[–ATR], shown with capitalization) and trigger harmony up to and including the stressed vowel (Hualde 1989, Penny 1978):

(1)

pÍntU	'male calf'	cf. pínta 'female calf'
pÍntU	'to dry him'	cf. sekálo 'to dry it' (mass)
kÁrAbU	'tawny owl'	
orÉgAnU	'oregano'	
antigwÍsImU	'very old'	

- Overshoot: under certain conditions, harmony extends beyond the stressed vowel:

(2)

pIyÍhkU	'pinch'	bUhÁnU	'worm'
ehpInÁθU	'spinal cord'	mAr̄ÁnU	'pig'
mUr̄ÍyU	'stone'	tAmbÚhU	'short and fat person'

- Why?
  - A second source of centralization: Labial-Induced Centralization: labial-adjacent mid vowels centralize (3a).
  - Other labial-adjacent vowels do not centralize (3b), except as targets of overshoot in harmony (2).

(3)

a.		b.	
mEñíka	'pinky'	piyíhkos	'pinches'
gwEbéra	'egg-basket'	pintáa	'painted' (fem)
bOnúka	'weasel'	buhános	'worms'
mOrθíya	'blood-sausage'	pasár	'to pass'

- Overshoot is a gang effect (Pater 2009).
  - Neither harmony nor Labial-Induced Centralization can target these vowels on their own, but in combination they can.
- This provides support for Positive Gradient Positional Licensing (PG-PL; Kaplan to appear).
  - PG-PL induces the right gang effect. Standard Positional Licensing fails.

Harmony: PG-PL

- PG-PL: a theory of Positional Licensing for Harmonic Grammar that avoids pathologies induced by standard Positional Licensing (e.g. Walker 2011).
- PG-PL rewards licensed features and also rewards harmony on non-licensors.

(4) LICENSE([–ATR], $\acute{\sigma}$): assign +1 for each [–ATR] that coincides with $\acute{\sigma}$. For each such [–ATR], assign +1 for each additional position it coincides with.

- This motivates harmony everywhere.
- CRISPEDGE (Ito & Mester 1999) prevents PG-PL from triggering overshoot in the normal case.

(5) CRISPEDGE([–ATR], $\acute{\sigma}$, L): The stressed syllable's [–ATR] cannot extend beyond the left edge of that syllable.

(6)

/oréganu/	LICENSE 4	*[–ATR] 3	CRISPEDGE 2	*[+hi, +ATR]# 1	*H*
a. oréganu				−1	−1
b. oréganU		−1			−3
☞ c. orÉgAnU	+3	−3			3
d. OrÉgAnU	+4	−4	−1		2

Labial-Induced Centralization

- Normally, only mid vowels centralize:

(7) a. *LAB-[+ATR]$_{mid}$: assign −1 for each [+ATR, –high, –low] vowel adjacent to a labial.
b. *LAB-[+ATR]$_{\text{V}}$: assign −1 for each [+ATR] vowel adjacent to a labial.

(8) a.

/bonúka/	*LAB-[+ATR]$_{\text{mid}}$ 4	*[–ATR] 3	*LAB-[+ATR]$_{\text{V}}$ 2	*H*
a. bonúka	−1		−1	−6
☞ b. bOnúka		−1		−3

b.

/piyíhkos/	*LAB-[+ATR]$_{\text{mid}}$ 4	*[–ATR] 3	*LAB-[+ATR]$_{\text{V}}$ 2	*H*
☞ a. piyíhkos			−1	−2
b. pIyíhkos		−1		−3

- *[–ATR] prevents satisfaction of *LAB-[+ATR]$_{\text{V}}$.

The Gang Effect

- Overshoot: harmony extends beyond the licensor just when it would also produce Labial-Induced Centralization.
- Overshoot satisfies both LICENSE and *LAB-[+ATR]$_{\text{V}}$.
- Combining (6) and (8) produces overshoot in exactly the right places:

(9)

/piyíhku/	LICENSE 4	*[–ATR] 3	CRISPEDGE 2	*LAB-[+ATR]$_{\text{V}}$ 2	*H*
a. piyíhkU		−1		−1	−5
b. piyÍhkU	+2	−2		−1	0
☞ c. pIyÍhkU	+3	−3	−1		1

- LICENSE and *LAB-[+ATR]$_{\text{V}}$ gang up on the other constraints. Pretonic harmony occurs when it satisfies both at once.
- But (6) and (8) still hold: on their own, LICENSE and *LAB-[+ATR]$_{\text{V}}$ cannot overcome *[–ATR] and CRISPEDGE.

Alternatives

- PG-PL's reward for harmony beyond the licensor is crucial.
- PG-PL that does not reward overshoot fails (10), as does standard Positional Licensing (11).

(10)

/piyíhku/	LIC 4	*[–ATR] 3	CRISP 2	*LAB-[+ATR]$_{\text{V}}$ 2	*H*
a. piyíhkU		−1		−1	−5
☠ b. piyÍhkU	+2	−2		−1	0
(☞) c. pIyÍhkU	+2	−3	−1		−3

(11)

/piyíhku/	LIC 4	*[–ATR] 3	CRISP 2	*LAB-[+ATR]$_{\text{V}}$ 2	*H*
a. piyíhkU	−1	−1		−1	−9
☠ b. piyÍhkU		−2		−1	−8
(☞) c. pIyÍhkU		−3	−1		−11

- Without PG-PL, the gang effect disappears.
- By design, *LAB-[+ATR]$_{\text{V}}$ cannot trigger overshoot on its own.

Summary

- Overshoot in Tudanca Montañés supports PG-PL's reward for harmony beyond the licensor.
- PG-PL makes a gang effect possible, but in other situations its reward for harmony is countered by CRISPEDGE.

Positional Licensing cannot be concerned solely with harmony on the licensor. It must also motivate harmony in non-licensing positions, even those that are not in the expected path of harmony.

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