

MAIN CLAIM

- the complex tonology of Zacatepec Chatino follows in an account that **contrasts a phonological and a phonetic default-tone**
- > combines different concepts of default-tone in one language
- two levels of default-ness are predicted in an **OT-system** where an expected default repair can be blocked in certain contexts

LANGUAGE BACKGROUND

- Otomanguean language, spoken in the town of San Marcos Zacatepec
- data from Villard (2015) (cf. also Villard (2010); Villard and Woodbury (2012))
- tone levels low (=a^L), mid (=a^M), high (=a^H), and superhigh (=a^S)
- TBU=μ; two contour tones LH and LS

DATA 1: EPENTHESIS & SPREADING

- there are underlyingly toned and **tone-less TBU's**
- final **H and S spread** to all following tone-less TBU's
- if spreading is impossible (no preceding H/S), **tone-less TBU's are realized as L**

(1) H/S-spreading and default-L (V:184+187)

UNDERLYING	SURFACE	UNDERLYING	SURFACE	
a. kwi ^M na ^H kula	/M.H/ /X.X/	kwi ^M na ^H ku ^H la ^H	[M.H][H.H]	'old snake'
b. yu ^L sin ^{LS} kula	/L.LS/ /X.X/	yu ^L sin ^{LS} ku ^S la ^S	[L.LS][S.S]	'old sea turtle'
c. ti ^L uk ^L wa ^{LS} kwana ^M	/X.L.LS/ /X.M/	ti ^L uk ^L wa ^{LS} kwa ^S na ^M	[L.L.LS][S.M]	'twelve thieves'
d. kwana kula	/X.X/ /X.X/	kwa ^L na ^L ku ^L la ^L	[L.L][L.L]	'old mirror'
e. kwi ^M to ^M kula	/M.M/ /X.X/	kwi ^M to ^M ku ^L la ^L	[M.M][L.L]	'old hen'
f. nkana ^M kwila	/X.M/ /X.X/	nka ^L na ^M kwi ^L la ^L	[L.M][L.L]	'I looked for fish'

DATA 2: FLOATING H & LS

- several words end in **floating H or LS tones**
- those are realized on the **rightmost tone-less TBU of the following word**
- potential **preceding TBU's become M**

(2) Realization of floating H and LS (V:187+223+233)

UNDERLYING	SURFACE	UNDERLYING	SURFACE	
a. kwana ^{M(H)} kula	/X.M(H)/ /X.X/	kwa ^L na ^M ku ^M la ^H	[L.M][M.H]	'old thief'
b. kwa ^{M(H)} nkajilyan ^M	/M(H)/ /X.X.M/	kwa ^M nka ^M jil ^H yan ^M	[M][M.H.M]	'already I farted'
c. kwa ^{M(H)} nkasa ^L to ^M	/M(H)/ /X.L.M/	kwa ^M nka ^H sa ^L to ^M	[M][H.L.M]	'already you threw it aw.'
d. mul ^L ya ^{M(LS)} kula	/L.M(LS)/ /X.X/	mul ^L ya ^M ku ^L la ^{LS}	[L.M][M.LS]	'old mule'
e. naten ^{L(LS)} kula	/X.L(LS)/ /X.X/	na ^L ten ^L ku ^M la ^{LS}	[L.L][M.LS]	'old people'
f. kwa ^{M(H)} nta ^M sa ^H la ^M	/M(H)/ /M.H.M/	kwa ^M nta ^M sa ^H la ^M	[M][M.H.M]	'already you are opening it'

DATA 3: 'FLOATING L'

- Villard (2015) lists a third floating tone: L
- but in the majority of contexts, there is no additional L, there are rather multiple **additional M's!** (on toneless TBU's (3-a-c) and/or on underlyingly L-toned TBU's (3-d+e))

(3) Realization of 'floating L' (V:187+246)

UNDERLYING	SURFACE	UNDERLYING	SURFACE	
a. ?a ^{L(L)} nkaji ^M n ^S an ^H	/L(L)/ /X.M.H/	?a ^L nka ^M ji ^M na ^S an ^H	[L][M.M.H]	'he/she did not ask for it'
b. ?a ^{L(L)} nkajilyan ^M	/L(L)/ /X.X.M/	?a ^L nka ^M jil ^M yan ^M	[L][M.M.M]	'I did not fart'
c. ?a ^{L(L)} nkakulwa ^{LH}	/L(L)/ /X.X.LH/	?a ^L nka ^M ku ^L la ^H	[L][M.M.LH]	's/he did not sweep it'
d. ?a ^{L(L)} nkasa ^L to ^M	/L(L)/ /X.L.M/	?a ^L nka ^M sa ^L to ^M	[L][M.M.M]	'you did not throw it aw.'
e. ?a ^{L(L)} ntusane ^{L(L)}	/L(L)/ /X.X.L(L)/	?a ^L ntu ^M sa ^M ne ^M	[L][M.M.M]	's/he sprays it'

-> ASSUMPTION: TBU's that remain toneless in the phonology = realized with a (phonetic) default M-tone <-

ANALYSIS 1: EPENTHESIS & SPREADING

- (4) ALIGN(T,PH)
Assign * to every TBU that intervenes between the rightmost TBU a morphologically coloured tone T is associated to and the right edge of the phrase.

(5) Spreading for H and S

	MAXAL	*LONGM	ALIGN	*LONGH/S	μ>T	DEPL	*LONGL
a.			5*!		**		
b.			3*	*			
c.			*!	*	**		
d.			5*!		*	*	

(6) No spreading for M: Epenthesis instead

	MAXAL	*LONGM	ALIGN	*LONGH/S	μ>T	DEPL	*LONGL
a.			5*		*!		
b.			*!	3*			
c.			5*		*	*	

ANALYSIS 2: FLOATING H & LS

- floating tones are realized on the rightmost tone-less TBU due to ALIGN
- they can not be preceded by an epenthetic tone due to CONTIGUITY (7): the **tone sequence of a morpheme may not be disrupted** (Landman, 2002)

(7) MCONT

Assign * to every tone that is not of morphological colour α and preceded and followed by a tone of morphological colour α.

(8) Floating H realization

	MCONT	*LONGM	T>μ	MAXT	ALIGN	*LONGH/S	μ>T	DEPL
a.			*!		3*		**	
b.					5*!		*	
c.					4*		*	
d.			*!		4*		*	
e.					4*	*!		
f.			*!		3*			

ANALYSIS 3: 'FLOATING L'

- observation: all bases with a 'floating L' end in L and nearly all L-final bases have a 'floating L'
- > **No floating L's, only OCP-effects for adjacent L's**

(9) *SPR-L_R

Assign * to every L-tone that is associated to TBU x in the input but associated to TBU x and y in the output if y follows x.

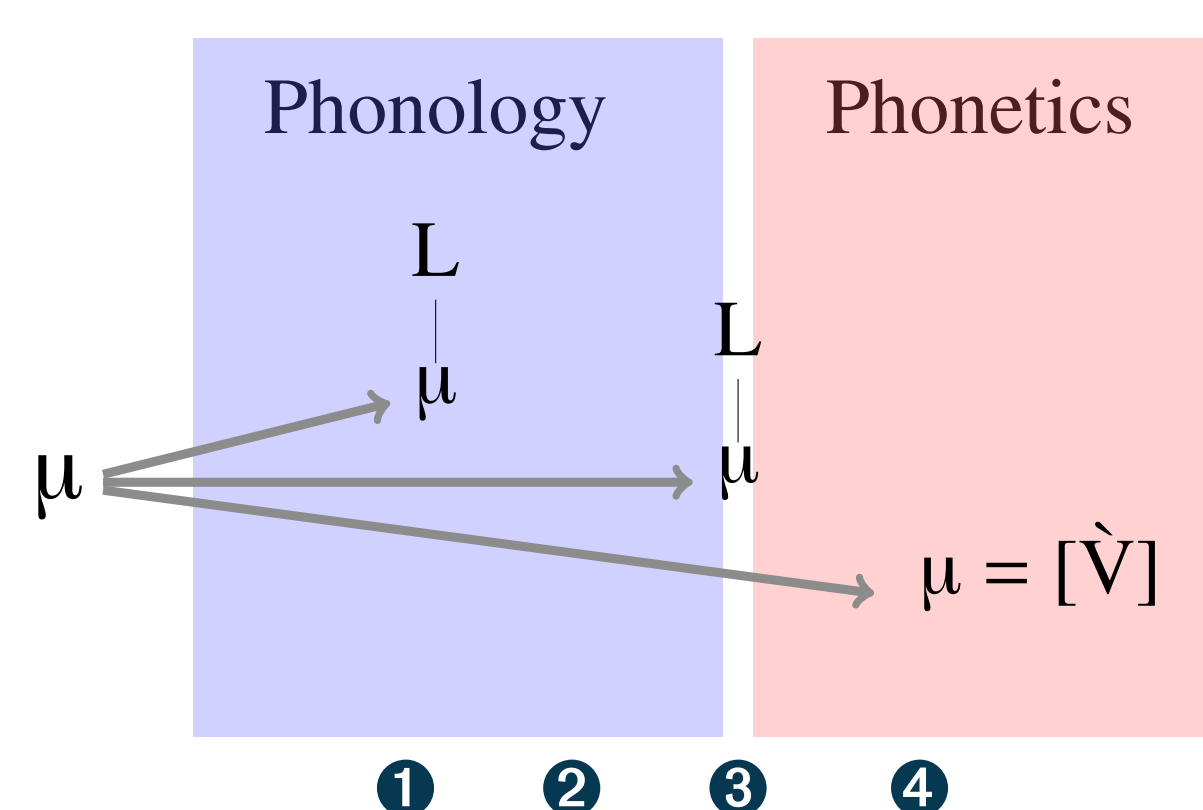
(10) OCP: No epenthesis of L

	*SPR-L _R	OCP-L	MAXT	ALIGN	μ>T	DEPL	*LONGL
a.				3*	**		
b.		*!		3*	*	*	
c.		*!		*		*	

(11) OCP: Deletion of L

	*SPR-L _R	OCP-L	MAXT	ALIGN	μ>T	DEPL	*LONGL
a.		*!		***	**		
b.		*		***	***		
c.		*!		*		*	

BACKGROUND: TONELESS TBU's



1 Default-tone in the lexical phonology

Tone is phonologically active (e.g. Pulleyblank (1986) on Dschang or Paster and Kim (2011) on Tiriki)

2 Default-tone in the post-lexical phonology

Tone inert in lexical phonology but present in post-lexical phonology (e.g. Hyman and Byarushengo (1984) on Haya or Pulleyblank (1986) on Tiv)

3 Default assigned after/at the end of phonology

Tone is phonologically inert but has a stable phonetic interpretation (e.g. Pulleyblank (1986) on Yoruba or Mtenje (1987) on Chichewa)

4 Default phonetic interpretation

Phonologically inert and phonetically unstable/a transitional function (e.g. Myers (1998) on Chichewa or McPherson (2011) on Tommo So)