

**Two case studies in Zapotec historical phonology**

1. (a) Dialectal distribution of the reflexes of Proto-Zapotec (= PZ) \*tty/\*ty, \*ttz/\*tz  
 (b) Phonemicization of /r/.
2. Northern (Yatzachi El Bajo, Zoogocho, Cajonos, Atepec, Yalálag, Choapan)  
 Papabuco (Zaniza, Texmelucan)  
 Lachixío (Lachixío; Asunción)  
 Southern Extended Coatec (Coatlán; Coatlán-Loxicha)  
 Miahuatec (Miahuatlán; San Agustín Mixtepec); Cisyautepecan (Quiegolani)  
 Central Isthmus (Juchitán)  
 Valley (Córdova, Mitla, Quiaviñí, Albarradas, Guelavía, San Pablo Güilá,  
 Chichicapan, Ayoquesco)

3. Reflexes of \*tty/\*ty, \*ttz/\*tz

	Coatlán-Loxicha (South)	Papabuco/Lachixío (?)	North/Isthmus/South	Valley
*tty	t <sup>1</sup>	c (> tʃ)	tʃ / tʂ	tj
*ty		j (> dʒ) / <sup>1</sup> __ r / <sup>1</sup> __	r	dj / <sup>1</sup> __ r / <sup>1</sup> __
*ttz	tʃ	tʃ (> ʂ)	ts	tʃ
*tz	(*dʒ >) ʒ	dʒ (> z)	s	ʒ
*tty/_i			(t)s / (t)ʃ	ts / tʃ
*ty/_i			dz	dz / dʒ / s
*ttz/_i				ts
*tz/_i				z

3. \*tty/\*ty, \*ttz/\*tz

Papabuco/Coatlán-Loxicha/Lachixío	North/South/Isthmus/Valley		
*ttz > tʃ (> ʂ)	*tty, *ttz / __ i > (t)s / (t)ʃ		
*tz > dʒ (> z)	*ty, *tz / __ i > (d)z / (d)ʒ		
Papabuco/Lachixío	Coatlán-Loxicha	North/South/Isthmus	Valley
*tty > c (> tʃ)	*tty, *ty > t	*tty > tʃ / tʂ	*tty > tj
*ty > r ~ j (> dʒ)		*ty > r	*ty > r ~ dj
		*ttz = *tty, *ttz / __ i	*ttz > tʃ
		*tz = *ty, *tz / __ i	*tz > dʒ
4. Córdova's Zapotec (recorded in 1578)	*tty, *ttz / __ i > <ch>		
	*ty, *tz / __ i > <ch>		
		*tty >	<t(h)>
		*ty >	<t ~ r>
		*ttz >	<ch>
		*tz >	<ch>

5. "Ra, re, ri, ro, ru. no los ay. Sino es que en la pronunciacion de. te. ti. to. tu. pronuncian los yndios las tt. como. r. liquidandolas. vt torobaya pro totobaya, y otras assi" (Córdova 1578:71).  
 "A la. r. hazen que sirua de. t. vt torobaya, pro totobaya. Ciroo, pro citao..." (Córdova 1578:73).

<sup>1</sup> tj after clitics.

- |     |           |                    |                         |
|-----|-----------|--------------------|-------------------------|
| *ty | > t:      | *tyoʔwa ‘mouth’    | > tòhua                 |
|     | > t ~ th: | *tyeʔe ‘water jar’ | > tihi                  |
|     | > t ~ r:  | *tyopa ‘tenate’    | > tóo ~ thóo(...)       |
|     |           | *tyä ‘to end’      | > to.taa.ya ~ to.raa.ya |
|     |           | *tyaʔwo ‘big, fat’ | > ti.tào.a ~ na.rào     |
|     |           | *tyoʔpa ‘big’      | > na.tòba ~ na.ròba     |
|     |           | *ke:ʔtyu ‘hole’    | > queto ~ quèro         |
|     |           | *p+ etya ‘turkey’  | > pète ~ père           |
6. Stress-related developments \*ty > r ~ dj in Valley Zapotec and \*ty > r ~ j (> dʒ) in Papabuco are post-sixteenth-century. Ayoquesco (Valley) does not attest this change (\*tty > tj & \*ty > r).
7. Other evidence that [r] is phonemicized late is its replacement by /l/ in Spanish loanwords:  
Zaniza Zapotec           *durazno* > *tilàz* ‘peach’  
                                  *cocinero* > *kusnely* ‘cook’  
(cf. later *tijeras* > *tixer* ‘scissors’)
8. [r] seems to have been an allophone of /j/ (= lenis counterpart of /c/)
- 8(a) Spanish [dj], [d] / \_\_ e, i > Texmelucan [j], Zaniza [dʒ]  
*dios* > Texmelucan *ñgyoozh*, Zaniza *dyuzh*  
Spanish *naranja* [r] > Cajonos *nchaxhu* [tʃ]
- 8(b) Spanish *remedio* [dj] > Zaniza *armer* [r]  
Spanish *machete* [tʃ]<sup>2</sup> > Zaniza *m(a)rity* [r]
- 8(c) Spanish [tj], [t] / \_\_ e, i > Zaniza [tʃ] (earlier [c])  
*tienda, tinta, machete*           *tʃen, tʃin, m(a)ritʃ*
- 8(d) Córdova spells [j] as <t> or (rarely) <th> and [c] as <ɕ>, <tt> or <th> (Smith Stark 2000:44f).
- 8(e) PZ \*ty = [j], \*tty [c] > preserved in Texmelucan as *j*, *c*  
> cf. Chichicapan *tx dx* (laminal alveopalatals): *dxa* ‘rock’ [dxʲa:]
9. Syntactic doublets in Papabuco and Valley Zapotec
- |          | <u>Post-stress development of *ty</u> | <u>Pre-stress development of *ty</u> |
|----------|---------------------------------------|--------------------------------------|
| Texm     | laʃ ‘squash seed’                     | làr-dòð ‘spirit, heart’              |
|          | uuʃ ‘fruit’                           | lar-jily ‘mamey seed’                |
|          | jeʃ ‘pine, tar’                       | ùr-lò ‘eye’                          |
|          |                                       | jer-doo ‘large pine’                 |
|          |                                       | jer-giny ‘candle’                    |
|          |                                       | jer-boo ‘coal’                       |
|          | jeeʃ ‘hole’                           | jer-baa ‘tomb’                       |
|          |                                       | jer-las ‘valley’                     |
|          |                                       | jer-yuu ‘well’                       |
| Mitla    | bejd ‘turkey’                         | ber-xijg ‘chachalaca occidental’     |
| SLQZ     | bu’udy ‘chicken’                      | bar-xya’ahcw ‘wild turkey’           |
| SP Güilá | /b̥iidy/ ‘domestic bird’              | bàr-g̥iidy ‘butterfly’               |

<sup>2</sup> Spanish palatal affricate was borrowed as a lenis palatal stop (cf. similar changes in Gullah *chew*, *Jack* > [c]u, [j]ak and Saramaccan *muchacho* > mo[c]ó, etc.).