

Notes on Mixtec comparative phonology

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Mixtec languages

Mixtec < Mixtecan < Amuzgo-Mixtecan < Otomanguan

53 languages according to Glottolog

J.K. Josserand's PhD dissertation "Mixtec Dialect History" (1983)

- one of the best reconstructions of Otomanguean intermediate protolanguages
- lists reflexes of 188 Proto-Mixtec etymons in 122 daughter varieties

Proto-Mixtec phonological system

CHART V-2

PHONOLOGICAL UNITS OF PROTO-MIXTEC (BRADLEY AND JOSSERAND 1982)

Consonants:

k ^w	t	k
	ⁿ d	
	s	x
	n	
w	l	y

Vowels:

i	ɨ	u
e	a	o
V : ʏ : Vʔ : ʏʔ		

CHART V-6

TONIC AND ULTIMATE SYLLABLE VOWEL COMBINATIONS IN PROTO-MIXTEC:

FREQUENCIES IN 594 RECONSTRUCTED FORMS

Final syllable vowel		O U T E R			I N N E R		
		*i	*u	*a	*ī	*o	*e
O U T E R	*i	ii 49	iu 18	ia 27	īī 0	io 22	ie 7
	*u	ui 29	uu 37	ua 3	ūī 0	uo 0	ue 25
	*a	ai 44	au 19	aa 78	āī 6	ao 0	ae 3
I N N E R	*ī	īī 4	īu 2	īa 3	īī 70	īo 0	īe 0
	*o	oi 7	ou 0	oa 1	ōī 0	oo 68	oe 2
	*e	ei 15	eu 19	ea 4	ēī 0	eo 1	ee 31

Proto-Mixtec phonotactics

*i - ī not reconstructed

*e - ī not reconstructed

*ī - i extremely rare

Proto-Mixtec *k vs. *x

PM *k > k in all varieties

PM *x > x, č, š, s, y depending on variety

No contrast before *a and *o

*k before *a	*k before *o
*kati? <i>cotton</i>	*siko <i>smell</i>
*ka?nu? <i>big (sg.)</i>	*koyq <i>meat</i>
*ka?yu <i>paint</i>	*sikq <i>blouse</i>
*ka?ndi <i>it thunders</i>	*koo? <i>snake</i>
*ndeka <i>glue</i>	*yoko? <i>tassel</i>
*ndika? <i>mamey</i>	*koo ye?ndi? <i>rainbow</i>
*kuka <i>comb</i>	*ndiko? <i>grind</i>
*ni kaku <i>be born</i>	

No contrast before *u

*k before *u

*kute <i>round</i>	*tuku <i>other</i>
*suku? <i>neck</i>	*kuka <i>comb</i>
*yuku? <i>hill</i>	*ni kaku <i>be born</i>
*ku iku <i>sew</i>	*yuku <i>brush</i>
*ku iso <i>will carry</i>	*yuku? <i>furrow</i>
*yuku a <i>that</i>	*kuni <i>will know</i>
*iku <i>yesterday</i>	

Contrast before *i

*x before *i		*k before *i
*xito <i>bed</i>	*xexiʔ <i>eat</i>	*xekj <i>lay (egg)</i>
*xiyoʔ <i>griddle</i>	*wexi <i>is coming</i>	*kixi <i>will come</i>
*yexjʔ <i>gourd</i>	*uxi <i>ten</i>	*kini <i>ugly</i>
*xity <i>oven</i>	*wixj <i>cold</i>	
*xi toʔo <i>owner</i>	* ⁿ dixj <i>wing</i>	
*kixi <i>will come</i>		

Contrast before *i

*k before *i	*x before *i
*kiwɨ? <i>four</i>	*xiti? <i>guts</i>
*kiti? <i>animal</i>	
*yikɨ? <i>squash</i>	
* ⁿ diki? <i>horn</i>	
*kisi? <i>clay pot</i>	
*kiwi? <i>day</i>	

Contrast before *e

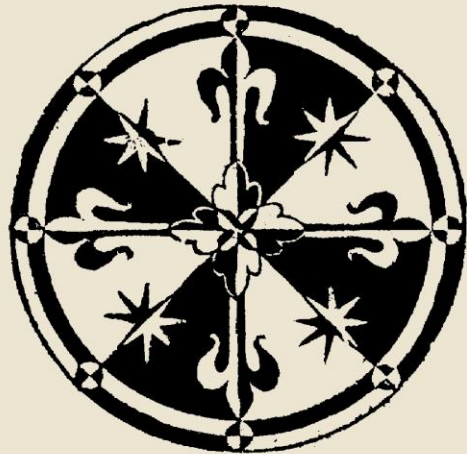
*x before *e		*k before *e
* ⁿ duxɛʔ <i>vomits</i>	*yuxɛʔ <i>cornmeal</i>	*keyiʔ <i>go out</i>
*suxɛʔ <i>lazy</i>	*xeʔe <i>foot</i>	
*uxe <i>seven</i>	*xeʔ ⁿ de <i>cut</i>	
*xetuʔ <i>box</i>	*xeʔu <i>fifteen</i>	
*xekj <i>lay (egg)</i>	* ⁿ dixɛʔ <i>sandal</i>	
*xexiʔ <i>eat</i>	*laxɛʔ <i>chachalaca</i>	
* ⁿ dixe <i>truth</i>	*xetu <i>trousers</i>	

VOCABVLARIO

EN LENGVA MISTECA, HECHO

por los Padres de la Orden de

Predicadores, que residen en ella, y vltima
mente recopilado, y acabado por el
Padre Fray Francisco de Alua-
rado, Vicario de Tamaqu-
lapa, de la misma
Orden.



EN MEXICO

Con Licencia, En casa de Pedro Ball

1593.

Colonial Mixtec of Teposcolula (16th century)

PM *i > Teposcolula <e>
(perhaps /i/)

PM *i > Teposcolula <i>

Reflexes in Teposcolula

PM (Josserand 1983)	Teposcolula	PM (Josserand 1983)	Teposcolula
*xito <i>bed</i>	sito	*uxi <i>ten</i>	usi
*xiyoʔ <i>griddle</i>	siyo	*wixj <i>cold</i>	wisj
*yexjʔ <i>gourd</i>	yasi	* ⁿ dixj <i>wing</i>	ⁿ disj
*xity <i>oven</i>	sitny		
*xi toʔo <i>owner</i>	stoʔo	*xekj <i>lay (egg)</i>	sake
*xexiʔ <i>eat</i>	sasi	*kixi <i>will come</i>	kesi
*wexi <i>is coming</i>	wasi	*kini <i>ugly</i>	n/a

Reflexes in Teposcolula

PM (Josserand 1983)	Teposcolula	PM (Josserand 1983)	Teposcolula
*kiwɨʔ <i>four</i>	kɛmj	*xiti <i>guts</i>	site
*kitiʔ <i>animal</i>	kete		
*yikɨʔ <i>squash</i>	yeke		
* ⁿ dikiʔ <i>horn</i>	ⁿ deke		
*kisi <i>clay pot</i>	keɗe		
*kiwiʔ <i>day</i>	kevi		

Josserand's PM *e(?)yi/e > Tep. a(?)i

PM (Josserand 1983)	Teposcolula	PM (Josserand 1983)	Teposcolula
*keyi? <i>go out</i>	kai	*teye <i>man</i>	tai
*le?yi? <i>armpit</i>	ḏa?i	*weye? <i>this one</i>	ma?j
*k ^w e?yi <i>sickness</i>	k ^w a?i	*k ^w eye <i>slow</i>	k ^w ai
*we?yi <i>house</i>	wa?i		
*weyi <i>heavy</i>	wai	*sa?yi <i>child</i>	ḏa?ya

No need to reconstruct *x for PM

Josserand's *x = *k before front vowels

The original distribution of PM *i vs. *ī is faithfully preserved in 16th century Mixtec of Teposcolula

Modern Mixtec varieties eliminate disharmonic vowel sequences: *ī-i > i-i, *i-ī > i-ī, *e-ī > e-ī

Josserand's PM *e(?)yi can be reconstructed as *a(?)i or *a(?)yi

Josserand's PM *a?yi can be reconstructed as *a?ya

No need to reconstruct *x for PM

PM (Josserand 1983)	PM – revised reconstruction	Teposcolula
*xekj <i>lay (egg)</i>	*kekʃ	sakę
*kixi <i>will come</i>	*kiki	kesi
*kini <i>ugly</i>	*kini	n/a
*xiti <i>guts</i>	*kiti	site
*keyiʔ <i>go out</i>	*kaiʔ (or *kayiʔ)	kai
*saʔyi <i>child</i>	*saʔya	ḏaʔya

One more source of /x/ before back vowels

Proto-Mixtec aspectual prefixes [T. Kaufman apud Macaulay 1996]

*xi- ‘durative / realis’ [= *ki- in our reconstruction]

*ka- ‘potential’

*ku- ‘potential’

Chalcatongo Mixtec [Macaulay 1996]

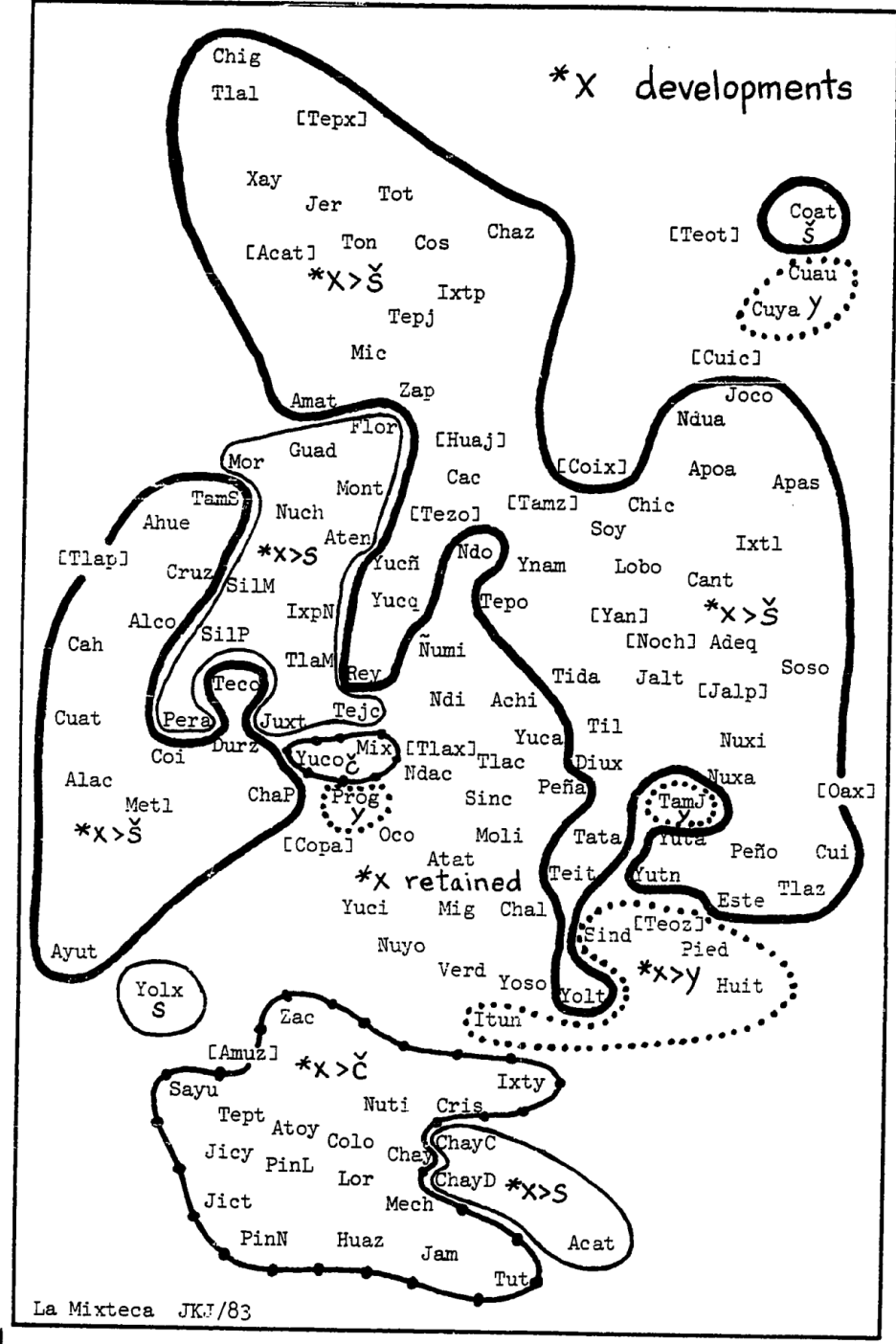
	Realis	Potential
loan	xi- + anú -> xanú	ku- + anú -> k ^w anú
boil over, spill	xi- + atu -> xatu	ka- + atu -> katu
dance	xi- + čáʔa -> xičáʔa	ka- + čáʔa -> kačáʔa
sing	xi- + ta -> xíta	ka- + ta -> káta

Problems with diachronic typology

1) $k > x$ before front vowels

2) $x > \check{c}$

Both changes are extremely uncommon typologically!



Problems with dialect geography

/x/ in the center vs. /č/ and /š/ on the periphery
 => /x/ is innovative

A more plausible sequence of changes

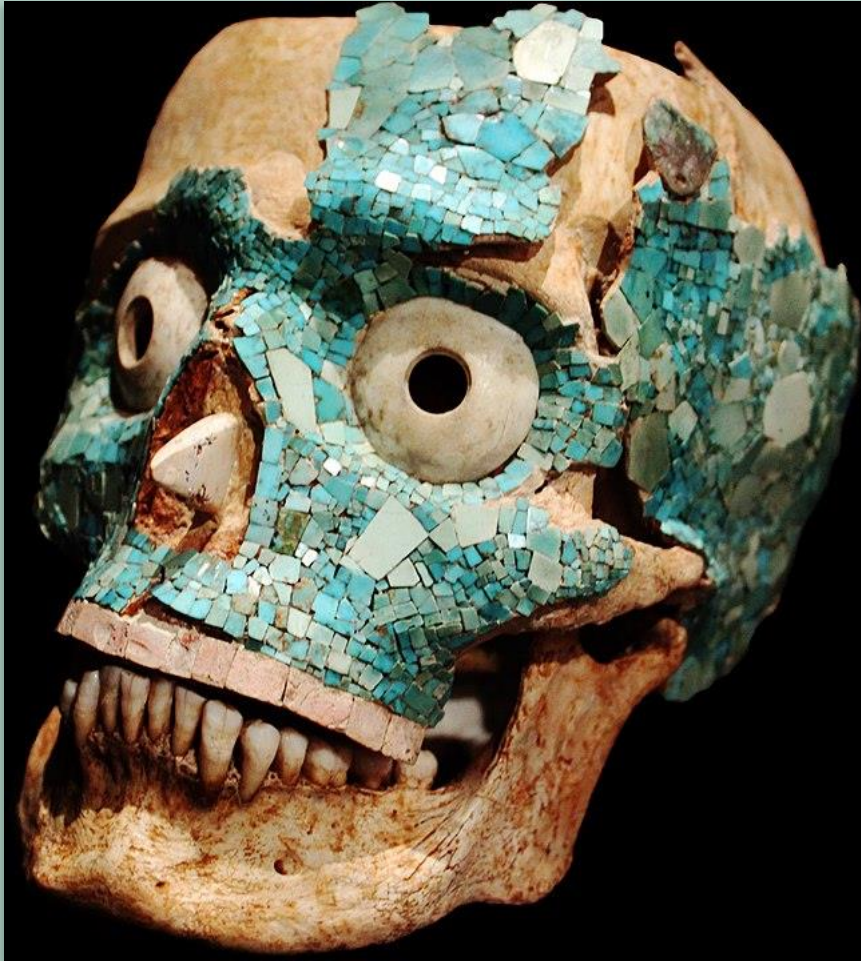
k / _i,e > č

č > š

š > x (cf. Spanish)

š > s

š > y



Thank you!

kúta?ùná!

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