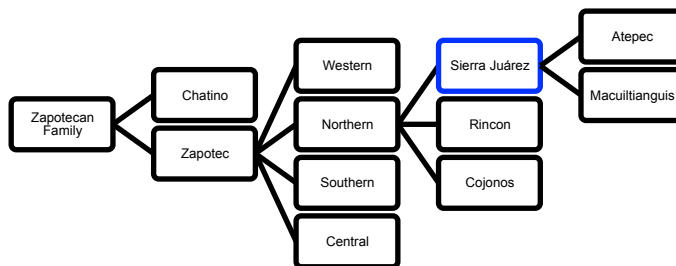


Applying Kaufman's model of Zapotecan verb classification to Sierra Juárez Zapotec

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1.0 Overview

- Kaufman (1987, 1988): Zapotecan languages exhibit four verb classes traced to Proto-Zapotec.
- Shown for several Zapotec languages in the Central and Western branches (Beam de Azcona, 2004; Enríquez Licón, 2009; Pérez Báez & Kaufman, 2012, in press; Pérez Báez, Sicoli, Benn, & Riestenberg, 2014; Pérez Báez, Sicoli, Cata, & Cruz Santiago, 2013; Riestenberg & Sicoli, 2015; Smith-Stark, 2002) as well as some related Chatino languages (Campbell, 2011; Villard, 2009).
- In contrast, existing documentation of Sierra Juárez Zapotec (SJZ), a group of Northern Zapotec varieties, describes 6-12 verb classes (Bartholomew, 1983; Foreman, 2006; Tejada, 2012).
- Kaufman's system can be straightforwardly applied to data from two SJZ varieties, Atepec Zapotec and Macuiltianguis Zapotec, reducing the number of classes and prefixes needed to account for SJZ verbal morphology and requiring a reanalysis of a subset of verb roots.
- This approach (1) accounts for certain historical sound changes, and (2) makes more explicit morphological connections between Northern Zapotec and other branches of Zapotecan.



- Atepec Zapotec (AZ): Tejada (2012)
- Macuiltianguis Zapotec (MacZ): 86 verbs recorded with two native speakers (female age 71 and male age 73) in habitual, completive, and potential aspect forms in San Pablo Macuiltianguis in fall 2015 as part of larger fieldwork project

2.0 Kaufman's model of Zapotecan verb classification

An example of an SJZ verb: -tsiana 'jump' HAB: ritsiana CMP: gutsiana POT: ítsiana

Table 1. Overview of Kaufman's model

(Kaufman, 1987, 1988; Pérez Báez & Kaufman, 2012, in press; Pérez Báez, Sicoli, Benn, & Riestenberg, 2014)

Red = ProtoZap	Habitual aspect	Completive aspect	Potential aspect
CLASS A	*tji- all classes	*kwe- unique to this class	*ki- plus H tone shared with Class B
CLASS B	*tji- all classes	*ko- shared with Classes C & D	*ki- plus H tone shared with Class A
CLASS C	*tji- all classes	*ko- shared with Classes B & D	*k- plus H tone shared with Class D
CLASS D	*tji- all classes	*ko- plus replacive consonants shared with Classes B & C	*k- plus H tone shared with Class C

Table 2. Kaufman's verb class system applied to Guadalupe Guevea Zapotec (Central)
(Pérez Báez, Sicoli, Benn, & Riestenberg, 2014)

	Stem	Gloss	HAB	CMP	POT
			ra-	bi-, gu-	gi-, g-
CLASS A	-dʒid	'pierce'	ra-dʒi:d	bi-dʒi:d	gi-dʒi:d
CLASS B	-lâ	'rip'	ra-lâ:	gu-lâ:	gu-lâ:
CLASS C	-díll	'fight'	ra-díll	gu-díll	tíll (d ~ t)
CLASS D	-be	'take off'	ra-be:	gu-le: (b ~ l)	kwé: (b ~ k ^w)

3.0 Existing classifications of SJZ verbs

Table 3. Existing classification of SJZ verbs
(AZ: Bartholomew, 1983; Tejada, 2012; MacZ: Foreman, 2006)

	Stem	Gloss	HAB	CMP	POT	Kaufman Class
CLASS I-A	-θià	'close'	ru-θià	be-θià	ú-θià	A (-úθià)
	-tsianí ¹	'change'	ru-tsianí	be-tsianí	gú-tsianí	A (-útsia-ní)
CLASS I-B	-eʔ	'hit'	ru-éʔ	be-eʔ	w-eʔ	A (-uéʔ)
	-eʔ	'give'	ru-eʔ	be-eʔ	gwe-eʔ	A (-uéʔ)
CLASS II-A	-láʔ-ni	'see (sth.)'	ri-láʔ-ni	bi-láʔ-ni	í-laʔ-ni	A
	-deteʔ	'learn'	ri-deteʔ	bi-deteʔ	i-deteʔ	A
CLASS II-B	-láni	'hug'	ri-láni	gu-láni	í-láni	B
	-cheʔne	'scratch'	ri-cheʔne	gu-cheʔne	í-cheʔne	B
CLASS II-C	-júnna	'return (sth.)'	re-júnna	be-júnna	é-júnna	A (-e-júnna) caus
	-juni	'repair'	re-juni	be-juni	é-júni	A (-e-juni) caus
CLASS III	-edá	'wait for'	ri-bedá	u-ledá	k ^w édá	D (-bedá)
	-ettʃa	'take out'	ri-bettʃa	gu-lettʃa	k ^w éttʃa	D (-lettʃa)
	-tillá	'fight'	ri-tillá	gu-tillá	tílla	C
	-tilla	'fight'	r-tilla	gu-tilla	tílla	C
CLASS IV-A	-áda	'sow'	ra-ada	gu-uda	ga-áda	B
	-kkùʔ-zô	'get dressed'	râ-kkùʔ-zô	gú-kkùʔ-zô	gá-kkùʔ-zô	B (-ákkùʔ-zô)
	-uza	'get paid'	ra-aza	gu-uza	gá-aza	B
CLASS IV-B	-áθθi	'sleep'	r-áθθi	u-táθθi	g-áθθi	D
	-aʔaθi	'sleep'	r-aʔaθi	gu-taʔaθi	g-áʔaθi	D
CLASS V-A	-àji	'burn oneself'	r-àji	g ^w -àji	ts-àji	B; FUT forms?
	-ia	'go'	r-ia	gw-ía	ts-ía	B; FUT forms?
CLASS V-B	-oʔo	'buy'	r-oʔo	g ^w -iʔi	g-óʔo	C (or B)
	-oʔo	'buy'	r-oʔo	gu-joʔo	g-óʔo	C (or B)
CLASS VI	-a-latsiʔ	'love'	ka-latsiʔ	k ^w a-latsiʔ	ká-latsiʔ	irreg.
	-kkalasiʔ	'want'	ar-kalasiʔ	u-kk ^w alasiʔ	á-kkalasiʔ	irreg.
CLASS VII²	-nellé	'visit'	ríta-nellé	ta-nellé	tá-nellé	?

Two important considerations:

(1) stress: 'ru.tsia.ni=na
HAB-change=3SG
'it changes/it is changing'

(2) vowel hierarchy: e > u/o > a > i

¹Foreman (2006) does not explicitly provide verb stems; those in Table 3 are my own interpretation of the data.

²Foreman (2006) reports no examples of Class VII verbs in MacZ.

4.0 Simplifying SJZ verb classification by applying Kaufman's model

Table 3. SJZ aspect markers (Kaufman's model)

	Habitual aspect	Completive aspect	Potential aspect
CLASS A	ri- all classes	bi-, be- unique to this class	í-, (g-) & H tone shared with Class B
CLASS B	ri- all classes	(g)u- shared with Classes C & D	í-, (g-) & H tone shared with Class A
CLASS C	ri- (AZ), r-(MacZ) all classes	(g)u- shared with Classes B & D	cons. alternation & H shared with Class D
CLASS D	ri- all classes	(g)u- & replacive cons shared with Classes B & C	cons. alternation & H shared with Class C

Table 4. Kaufman's verb class system applied to SJZ

	Stem	Gloss	HAB	CMP	POT
CLASS A	-uθià	'close'	r-θià	be-θià	g-úθià
	-uttòó	'close'	r-uttòó	be-ttòó	g-úttòó
	-xui?	'fill'	ri-xui?	bi-xui?	í-xuí?
	-dete?	'learn'	ri-dete?	bi-dete?	í-déte?
CLASS B	-láni	'hug'	ri-láni	gu-láni	í-láni
	-tsiana	'jump'	ri-tsiana	gu-tsiana	í-tsíana
	-tʃuna	'sow'	ri-tʃuna	gu-tʃuna	í-tʃúna
	-uza	'get paid'	r-aza	gu-za	g-áza
CLASS C	-tillá	'fight'	ri-tillá	gu-tillá	tílla
	-tilla	'fight'	r-tilla	gu-tilla	tílla
	-te	'pass'	r-te	gu-te	té
	-ðulo	'start'	r-ðu:lo	gu-ðu:lo	θú:lo (ð ~ θ)
CLASS D	-bedá	'wait for'	ri-bedá	gu-ledá	k ^w édá
	-bèdá	'wait for'	ri-bè:dá	gu-lè:dá (b ~ l)	k ^w é:dá (b ~ k ^w)
	-gani	'dig'	ri-gain	gu-tain (g ~ t)	káin (g ~ k)
	-aʔaθi	'sleep'	r-aʔaθi	gu-taʔaθi (ø ~ t)	g-áʔaθi

5.0 Accounting for historical factors

Mesoamerican areal labiovelar change: k^w → b (Beeley, 2014; Kaufman, 1974)

-edá → -bedá (D) 'wait for' HAB: ri-bedá POT: k^wédá (b ~ k^w)

Vowel hierarchy: e > u/o > a > i

-kkùʔ-zô → -ákkùʔ-zô (B) 'get dressed' HAB: r-ákkùʔ-zô //ri-ákkùʔ-zô//

6.0 Showing connections between SJZ and Zapotec varieties in other branches

	HAB	CMP	POT
Juchitán (Isthmus) Zap.	ri=	be=, gu=	gi=, g=, consonantal alternations
Current MacZ	ri-, r-, ar-	be-, bi-, gu-	i-, g-, consonantal alternations
Previous MacZ	ru-, re-, ri-, r-, r, ar/ir-	be-, bi-, gu-, gut-, u-, gw-	i-, e-, gu-, gw-, g-, ga-, ku-, kw-, tts-tʃ-, ikka

7.0 Future directions

- Elicit verbs in other aspectual forms
- Elicit compound verbs
- Focus on "Position 2" prefixes (causative, repetitive, middle, etc.) (Foreman, 2006)

References

- Bartholomew, D. (1983). Gramática Zapoteca. In N. Nellis, & J. G. Nellis (Eds.), *Diccionario zapoteco: Zapoteco de Juárez* (pp. 337-484). Mexico City: Instituto Lingüístico de Verano.
- Beam de Azcona, R. (2004). *A Coatlán-Loxicha Zapotec grammar*. UC Berkeley, Ph.D. Dissertation.
- Beeley, H. (2014). KWOD ERAT DEMONSTRANDUM: An empirically supported account of labiovelar historical developments. Poster presented at *Sound Change in Interacting Human Systems: 3rd Biennial Workshop on Sound Change*. Berkeley, CA.
- Campbell, E. (2011). Zenzontepec Chatino aspect morphology and Zapotecan verb classes. *International Journal of American Linguistics*, 77(2), 219–246.
- Enríquez Licón, M. E. (2009). Clases verbales en Zapoteco del Istmo. In C. Buenrostro (Ed.), *Memorias del III Coloquio Internacional de Lingüística Mauricio Swadesh* (pp. 365–375). Mexico: UNAM e INALI.
- Foreman, J. (2006). *The morphosyntax of subjects in Macuilitianguis Zapotec*. UCLA, Ph.D. Dissertation.
- Kaufman, T. (1974). Meso-American Indian Languages. *Encyclopedia Britannica, 15th edition*, vol. 11, pp. 956-963.
- Kaufman, T. (1987), updated winter 1988-1989. The phonology and morphology of Zapotec verbs. ms.
- Kaufman, T. (1988). Otomanguan tense/aspect/mood, voice, and nominalization markers. In *Hidden Knowledge Revealed, Part I*. Pittsburgh, PA: Samizdat Press.
- Pérez Báez, G., & Kaufman, T. (2012). Clases verbales en diidxa za (Zapoteco de Juchitán/del Istmo). In *Proceedings on the Conference on Indigenous Languages of Latin America V*. Austin, TX.
- Pérez Báez G., & Kaufman T. (in press). Verbal classification in Juchitán Zapotec.
- Pérez Báez, G., Sicoli, M., Cata, V., & Cruz Santiago, E. (2013). Inflectional Classes and Tonal Morphology across 10 Zapotec Languages. Paper presented at the *Annual Meeting of the Society for the Study of Indigenous Languages of Latin America*. Boston, MA.
- Pérez Báez, G., Sicoli, M., Benn, J., & Riestenberg, K. (2014). Hacia una reconstrucción del tono subyacente del prefijo del potencial en el proto-zapoteco. Paper presented at the *Coloquio sobre Lenguas Otomanguas y Vecinas (COLOV)*, Oaxaca, Mexico.
- Riestenberg, K. & Sicoli, M. (2015). Word structure and tone of Guadalupe Guevea Zapotec verbs. 2nd *International Conference on Mesoamerican Linguistics*, Los Angeles, CA.
- Smith-Stark, T. C. (2002). Las clases verbales del zapoteco de Chichicapan. In *Proceedings of the VI Encuentro Internacional de Linguística en el Noroeste* (pp. 165–212). Hermosillo, Mexico: Editorial Unison.
- Villard, S. (2009). Zacatepec Chatino verb classification and aspect morphology. In *Proceedings of the Conference on Indigenous Languages of Latin America IV*.