GWENDOLYN LOWES*
AUSENCIA LÓPEZ CRUZ**
University of Oregon, Eugene, OR, USA*
University of Texas, Austin, TX, USA*
Instituto Nacional de Antropología e Historia, Mexico City, Mexico **
glow@darkwing.uoregon.edu, nisgyee@hotmail.com

Tonal alternations in potential aspect within two variants of valley zapotec

1.0 Introduction[1]

In this paper we illustrate a brief comparison of two Valley Zapotec languages from a verbal perspective. To provide background we will briefly examine tone in the languages, the verbal template, subject marking and aspect marking. We then closely compare the two languages with regards to one of the three ways in which potential aspect is marked.

2.0 Background[2]

Zapotec languages are spoken in southern Mexico, primarily in the state of Oaxaca. Like Mixtecan, Chinantecan, Amuzgoan and other language families, they come from the Otomanguean stock. According to the Ethnologue, Teotitlán del Valle Zapotec (henceforth TdVZ) and San Pablo Güilá Zapotec (henceforth SPGZ) are both in the western Tlacolula sub-group (Grimes, 1990). Teotitlán del Valle is located approximately 20 kilometers east of Oaxaca City with a population exceeding 5,000 inhabitants. Most adults over 60 years of age consider themselves monolingual speakers of TdVZ and adults up to 60 are, for the most part, bilingual (Spanish/Zapotec). San Pablo Güilá is located approximately 74 kilometers southeast of Oaxaca City. SPGZ also includes the language spoken by the people of the four following ranches: San Felipe Güilá, Rancho Blanco o Colonia Libertad, Tierra Blanca and El Colorado Güilá. Of the estimated 5,200 total speakers of SPGZ, more than 60% are bilingual (Spanish/Zapotec) while 35% remain monolingual Zapotec speakers. Both languages are endangered, TdVZ being the most critically in danger of the two. Linguists and non-linguists in both villages have started revitalization projects to some degree.

2.1 Tone[3]

Both languages have complex tone and phonation systems. The seven vowels in TdVZ, and the six in SPGZ are described as combining long (VV) versus short (V) and laryngealized (V') versus plain (V) phonation. Both languages contrast high, ( ), low (ỹ) and low-falling ( ) tones. SPGZ further contrasts a high rising ( ) while TdVZ also has a low-rising (ỳ) and a mid tone ( ).

2.2 Structure of the Verb

The structure of the verb is Aspect.Root.Subject in both languages. Roots are generally monosyllabic; the few disyllabic roots are a transparent composition of two morphemes. In this paper, we examine only monosyllabic roots.

2.2.1. Subjects

Because the verb is always marked for a subject, the free-standing pronoun is optional in TdVZ and SPGZ, and usually not used unless to emphasize the subject. Table one below illustrates the pronominal systems of the languages.

[1] Many thanks are due first and foremost to the people of Teotitlán del Valle, especially Soledad González and her family, and Augustín Ruiz Ruiz. Fieldwork on TdVZ began as a research project initially funded by the University of Wisconsin, through a Hilldale Fellowship; thanks are also due to the University of Wisconsin.

[2] The TdVZ data for this paper were collected during a five month period, by one author, in the fall and winter of 2002-2003, and the summer of 2004 in Oaxaca City and Teotitlán del Valle, Mexico. The main consultants were two females, aged 18 and 26 and one male, aged 40 years, although a total of eight consultants contributed. SPGZ data come from the intuitions and observations of a native speaker, the second author, and from her consultation with other speakers in San Pablo Güilá. All English glosses are the authors' translations and any errors are our own.

[3] To be consistent, throughout the paper we use the standard orthography developed by Ausencia Lopez Cruz for SPGZ, for both variants. A few characters representing the sounds in TdVZ have been developed by Gwendolyn Lowes in consultation with Soledad González and Agustín Ruiz Ruiz. The relationship between character and sound should be obvious for the most part, however a few may warrant clarification: <x> is used for [ ], <ll> is used for [ ] and <dx> is used for [d].

Table 1: Pronouns in Teotitlán del Valle Zapotec and San Pablo Güilá Zapotec[4]

Person/Number	Free-standing TdVZ	Suffix TdVZ	Free-standing SPGZ	Suffix SPGZ
1SG.	na a	-â’	nàa’râ ~ nàa’	-â’
1PL. INCL.	dǔnùn	-ùn	dúnùnú	-nú
1PL. EXCL.	dǔnǔun	-ǔn		
2SG.FAM.	lùi ~ lèe	-û’	lìi’gá ~ lìi’	-ù’
2SG.FORM.	yùbyu’	-û’	gyúu’byù’	-ø
2PL.FAM.	lùitu	-tu	làa’dú	-dú
2PL.FORM.	yuubytu	-tu	gyúu’bydú	-ø
3SG.FAM.	laỳ’n	-à’n	làa’bí	-bí
3SG.FORM.	làa’n	-a’n	làa’bá	-bá
3SG.INF.[5]			làa’xà’	-xà’
3SG.AN.	laỳ’m	-um	làa’má	-má
3SG.INAN.	là’ìn	-ìn	làa’ní	-ní
3SG.SACR.	là’ iỳn	-ì’n	làa’nì’	-nì’
3PL.FAM.	là’dàn	-dàn	làa’rábí	-rábí
3PL.FORM.	là’dan	-dan	làa’rábá	-rábá
3PL.INF.			làa’ráxà’	-ráxà’
3PL.AN.	là’dum	-dum	làa’rámá	-rámá
3PL.INAN	là’dìn	-dì’n	làa’ráni	-ráni
3PL.SACR.	là’din	-di’n	làa’ránì’	-ránì’

2.2.3. Aspects

Both TdVZ and SPGZ have potential, habitual, progressive, completive, future and irrealis aspect. Figure two compares aspect-marking in both variants.

Figure 2: Aspect Marking in TdVZ and SPGZ

Aspect	Morpheme TdVZ	Morpheme SPGZ
Potential	ge-, gu-, ga-, (gè-, gù-, gà-)[6], g- chi-, ch-, b>kw, d>t, g>k, ø-	gí- (y-)[7], g-, ch- b>kw, d>t, g>k, l>nd, r>ty, ø-
Habitual	r-, rù-, rà-, rì-, rè	r-, ø-
Progressive	kà-, kày-	kà-, kày-, sáy- (ká-, káy- for 1st SG)
Completive[8]	ba-, gu-, by-	b-, ø- ~ w-, p-, m-, gw- b>kw
Future	zù-, z-	s-
Irrealis	nù-, nì- n-	ním-, ní-, ny-, n-

3.0 Marking in Potential Aspect

Potential aspect indicates an inchoative action, that is, an action in the near future that is certain to happen. It is also used to express a possibility or desire that an action be realized, or to express suggestions or conditional actions. Additionally, it can be used to negate actions that will (not) happen in the future. The most common way to mark potential is with ge-, gu-, ga-, g- (TdVZ) or gí- , g- (SPGZ). Example one below demonstrates this.

(1)		TdVZ	SPGZ
	Root:	zyàts	syá’ts
	POTENTIAL	gu.zyàts.û’	gí.syá'ts.ù’
		‘you will decrease (something)’	‘you will decrease (something)’

Potential Aspect in TdVZ and SPGZ is marked by one of three processes: a) adding a prefix (as evidenced in (1)), b) no prefix but a tonal change within the root or c) no prefix but changing the initial consonant within the root and the root tone. We will compare how TdVZ and SPGZ differ in regards to the third (c) process of marking potential aspect.

[4] The abbreviations are as follows: SG: singular PL: plural INCL: inclusive EXCL: exclusive FAM: familiar FORM: formal INF: informal AN: animal INAN: inanimate SACR: sacred

[5] The informal third person is used exclusively between men to refer to someone else in the third person

[6] For some verbs, these are in free variation. That is, the prefix may have low or high tone for any of the ga-, ge-, gu- prefixes. If the prefix carries a low tone, however, a tonal change will result (low or falling > high or mid) in the root, or, if the root is monosyllabic, a complex contour can result with the addition of a monosyllabic person suffix of the same vowel (i.e. 1st singular with monosyllabic root containing *a*).

[7] In some instances the prefix may be y-; it may be in free variation with gí within the word or change within the paradigm. For example, gí.bíig.â’ ~ y.bíig.â’ ‘I will approach’ and y.chí’ch.â’ ‘I will bother/annoy’ versus gí.chí’ch.ù’ ‘you will bother/annoy’. In TdVZ, a similar phonological change is in progress throughout the language; gy is sometimes pronounced as [g], [ ] (most common) or [j].

[8] Some tonal and consonantal alternations are found in SPGZ for completive aspect. It remains unknown whether TdVZ has similar alternations

3.1 Root Alternations in TdVZ[9]

If the root vowel in TdVZ has a low or falling tone and begins with b, d or g the following alternations will take place: b>kw, g>k, d>t/k[10]. When this occurs, the first vowel in the root will carry high tone. This is shown below in (3). Note there is no prefix, yet the root-initial consonant and the tone of the root have changed.

(2)	Root:	bàa'n	dêd	gêz
	POTENTIAL	kwan.û'	ted.û'	kez.û'
		'you will steal' (something)	'you will bypass'	'you will hug'

Subject plays an important role in the root alternations in TdVZ. All subjects with the exception of first person inclusive and exclusive undergo the above changes. The first person subjects, on the other hand, always employ the *gà* marker. The example below shows the roots from (2) but in first person plural inclusive.

(3)	Root:	bàa'n	dêd	gêz
	1ST.PL.INC.POT.	gà.baa'.nù	gà.ded.ùn	gà.dez.ùn
		'we will steal (something)'	'we will bypass'	'we will hug'

3.2 Root Alternations in SPGZ

If the SPGZ root begins with b, g, d, r, l the following root alternations will take place: b>kw, g>k, d>t, r>ty, l>nd. In SPGZ, the tone of the root plays a different role. If the tone is high-rising it will become high level. If the tone is low, it will become falling.

(4)	Root:	bàa'n	dúu'by	gèe's
	POTENTIAL	kwâan.à'	tuu'by.ni[11]	kêe's.à'
		'I will steal'	'it will become invloved'	'I will hug'
	Root:	rùu'g	làa'	
	POTENTIAL	tyûu'g.ní	ndâa'	
		'it will be cut'	'I will untie myself'	

If the root exhibits an alternation in SPGZ it will occur for all subject conjugations, including first person plural.

4.0 Conclusions

Of the three methods to mark potential aspect in TdVZ and SPGZ, we examined the third, in which the root-initial consonant is completely changed and the tone altered. The processes for both are similar yet we have noted some differences. In TdVZ only verbs with a low or falling tone are affected, in which case the tone will become high. In SPGZ a low tone will become falling and a high rising will become high level. The reason for these alternations is easily explained by a floating high tone that is associated with potential aspect which is realized on the root when no vowel in the prefix is available. Corroboration for this is the high tone which is still evident in TdVZ's potential markers *ge-*, *gu-*, and *ga-*

Being a generally more conservative language historically, TdVZ does not show the breadth of alternations that SPGZ exhibits. Where l-initial and r-initial roots routinely change in SPGZ, the majority of verbs in TdVZ accept the usual prefix. Only roots with low or falling tone in TdVZ will undergo the change whereas in SPGZ the tone of the root can also be high-rising. Finally, the first person plural in TdVZ never exhibits the consonant and tonal alternation that other subjects would for the same verb, whereas in SPGZ all subjects within the verb undergo the alternation.

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[9] Other than those mentioned below in 3.1, a very small number of verbs display root changes such as r>ty, r>t or l>ty. The few verbs in which these changes are recorded still need to be thoroughly studied.

[10] One word was found to have the change d>k. The reason for the change is beyond the scope of this paper.

[11] This root does not have a first person conjugation. It is only conjugated in the third person in SPGZ.